BANKING AND BUSINESS

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PREFACE

In this volume the authors have undertaken to present an outline of modern American banking in its relation to other business. Their intention has been to prepare a university and college text that would be of service in teaching those elements of banking which are most needed in the schools of business and commerce now in process of development at many of our universities. The arrangement of topics and the general direction of the discussion corresponds, broadly speaking, to the organization of the work in the introductory course in banking in the School of Business of Columbia University.

The teaching of banking in American colleges and universities has for many years past been closely associated or combined with instruction in the theory of money. Most college courses, we believe, are designated as courses in "Money and Banking." A customary way of presenting the material is to begin with a historical survey of the growth and development of money, followed, perhaps, by a sketch of the credit instruments which have in later years superseded it as mediums of exchange. This is followed, as a rule, by chapters dealing with the theory of money, prices, and the broader or more doctrinal side of the study. Banking is, in many instances, dealt with as a derivative of, or annex to, the monetary discussion, which is given chief place. Moreover, it has been the practice with not a few text writers to direct their attention chiefly to the more theoretical and to the

historical sides of the subject and to analyze banking chiefly as a public question.

No doubt the older method of textbook presentation has its merits, since otherwise it would hardly have continued as long or been maintained as persistently as has been the case. This plan is not, however, suited to the requirements of those who are pursuing their studies with a view to actual business life. While for such students it is essential that a reasonable basis of theory and principle should be afforded, this alone will not suffice, but it must be accompanied by at least a general outline of the actual methods adopted by banks in the conduct of their own operations and by exposition of their relationship to other types of business.

Experience, too, seems strongly to support the thought that in entering the general field of monetary science a beginning is best made with banking, and that that subject should be studied largely from a descriptive standpoint, with the intention of conveying to the student a fair outline knowledge of the bank as a working institution—an element in the modern business organization. The principles of money, it is thought, should be introduced incidentally and should be given a relatively secondary place, only such attention being given them as is needful to explain and sustain the discussions of banking itself by which they are preceded. Debate as to controverted points of theory and discussion of the abstractions of monetary science should, it is believed, be largely avoided, while the consideration of banking in its public or legislative aspects should for the same reasons be assigned to a secondary position, not because of any underestimate of its importance, but because of the belief that this is not the aspect in which the subject appeals most strongly to the student or to which he can to best

advantage give the first months of his study of the subject.

The authors have therefore endeavored, in this volume, after the first preliminary and general ideas have been considered, to introduce the student to the current organization and business practice of commercial banks. In so doing, moreover, it has been sought to emphasize less the internal organization of the bank itself than its business aspect as viewed from the outside. Particular attention has been given to the financing of the individual enterprise, the problems which must be met by the business man, in whatever occupation engaged, in connection with the transaction of the banking side of his operations. A succeeding section of the book has for reasons of convenience been devoted largely to a descriptive outline of banking in various aspects, an understanding of which seems necessary to full comprehension of present banking problems and conditions, although, strictly speaking, they would not find a place in a treatise upon banking in the commercial or narrower sense of the term. These phases of the discussion having been completed, the way is paved for a relatively brief outline statement of the relation of the bank to the monetary system and of its function in the development of prices.

The volume as thus presented embodies material which has for some years past been in use in the School of Business of Columbia University in the form of outlined mimeographed notes. Owing to the increase in the membership of the introductory classes, it had been deemed advisable to put the material into printed form, and eventually it was determined to give it a more formal shape as a textbook. It is hoped that the volume may be of service in other institutions

where the problem of teaching banking has presented itself in somewhat the same guise.

In the preparation of the volume an equal division of the chapters has been made between the authors, but the final text is the result of joint revision and adaptation, for which both are responsible. Sincere acknowledgment is made to Dr. W. H. Steiner, Assistant Director of the Division of Analysis and Research, Federal Reserve Board, for many valuable suggestions in the shaping of the volume.

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Columbia University, *December, 1921.*

Part I

EXCHANGE

BANKING AND BUSINESS

CHAPTER I

THE EXCHANGE OF GOODS

I. Exchange and the Division of Labor.

If we glance even casually at the modern organization of business, two features or elements in it present themselves as of striking suggestiveness:

1. Few persons are producing articles which they themselves want to consume or use.

2. Few persons sell or exchange their services or products directly for other services or products which they wish to consume or use.

It is true that there are exceptions to these general rules. The farmer may raise vegetables for his own table as an incident to staple-crop farming. The worker in a shop may be allowed to take goods, which he wants, from the stock and be debited with them against the salary due him for services. Many other illustrations of direct production or direct exchange might be cited, but only a little reflection is needed to show that they are immensely in the minority as compared with the general body of business. Men work, but not, as a rule, for themselves; they trade, but as a rule for things they do not want.

The facts just set forth lead to two conclusions or inferences which follow from the outstanding facts cited:

1. Business to-day is dependent upon the exchange

of goods and services. Nearly every transaction involves or calls for a process of sale and purchase.

2. This exchange must be carried on in terms of some commodity or value which serves as an intermediary or as a step from one to the other.

The intermediary which serves this purpose is what we ordinarily call money; the process of sale and purchase referred to involves, as an auxiliary, the operation known as banking.

Reasons why the exchange of goods has been developed into an indirect or roundabout process are usually set forth by economists somewhat as follows:

1. Abilities differ widely between individuals.

2. Therefore, the largest production is secured by having each producer devote himself to that article in which he can obtain greatest results.

3. The process of production is facilitated by having articles specialized and produced upon as large a scale as possible.

4. Hence the concentration of machinery and plants upon individual items which in many cases have no useful purpose except as parts in a whole that is to be assembled from many sources.

5. The considerations already suggested may be summed up in the proposition that division of labor is essential to and the basis of modern industry.

Division of labor depends upon and implies exchange, which in turn is only one part of the broader field of economics, and the ancillary processes or mechanisms already referred to.

The evident importance of exchange in economic life has led economists to assign it a place as one of the four fundamental divisions of their science, which are frequently enumerated as production, exchange, distribution, and consumption. Within each of these general grand divisions there has been developed a

group of specialized processes. Under the heading "exchange" there are thus included studies relating to the mechanism of money, prices, banking, as well as others. Banking is thus a special phase of the general economic process known as exchange.

II. Evolution of Exchange.

Exchange takes place because a greater amount of values can be produced through what has just been termed division of labor. In the primitive organization of society, division of labor was very limited. Individuals performed each for himself the principal operations necessary for the support and improvement of existence. The early family was in part founded upon primitive division of labor and thus had an economic side. Modern society rests fundamentally upon a very high development of the division of labor. Specialization in production renders necessary production on a large scale, and large-scale production implies an increasing degree of specialization. Commercial products are thus widely separated from the consumers who eventually make use of them. This fact necessitates a series of exchanges of goods. Exchange is thus essential to the organization of the modern world.

Not only is the high development of division of labor essential to modern business and industry, but it is also true that, as exchange advances toward more and more complex stages, the ascertainment of value or the rate at which commodities shall exchange for one another becomes more and more difficult. So long as a given product can be more or less directly connected with the use to which it is to be put, there is a subconscious measure of its exchange value which at least serves as a regulator or controlling factor. When the item produced finds its value only as an incident in

production of some far more highly complicated article —as, for instance, in the case of fuel used to operate spinning and weaving machinery—this indirect utility measure of exchange value disappears or becomes so vague as to be unavailable. The modern process of exchange, therefore, has, as a secondary reason for its existence, the necessity of determining the ratios of exchange of goods for one another. The ascertainment of the proper price of an article and the adjustment of that price in such a way as to permit regular and continuous production of it to occur in the desired quantity is, in large measure, dependent upon the proper operation of the mechanism of exchange.

Because of the complexity of the modern exchange process, there has developed much antiquarian or historical discussion regarding the successive steps by which the use of money was brought to its present status. The only really important matter in this whole historical discussion about the origin of money is that methods or processes of exchange differ and develop from period to period, there being no single or universally most advantageous way of exchanging goods. What is desired is to bring about their movement from producer through the various intermediate stages to the consumer with as little friction, cost, or loss as may be. This is sometimes effected by barter, although as seen at the outset, not usually, owing largely to the inconvenience of barter. It may sometimes be effected by sale for money and the subsequent purchase of other goods. Sometimes the most convenient method of transfer is afforded by a deferred exchange, a seller waiting for the return of other goods (desired by himself) by the trader who has taken his product. This kind of exchange is usually termed a credit operation or credit transfer.

It is clear, however, that in every condition or stage

of economic life there is a kind of exchange or a type of trading which best serves the needs of the parties to it, or the needs of the community, or both. The function and duty of business is to ascertain how such transfers may best be made and to bring them to fruition. The function of banking is to supply means of actually consummating the exchanges or transfers.

III. Types of Exchange Transactions.

We must now study somewhat more analytically the different possible types of exchange to which reference has been made, for the purpose of ascertaining the true significance of each.

1. When a producer ceases to consume his own output and exchanges it for the output of another similarly situated producer, the operation is called barter; and the goods exchange in proportion to the relative necessities and bargaining power of the participants.

2. When other producers engaged in turning out similar goods begin to participate in the process of exchange, offering their goods against one another and competing together, a market is established. In such a market where competition exists values tend toward a stable or uniform level and the power of one commodity to command others is called its purchasing power, or price.

3. When a commodity is offered for others in a competitive group of the kind just described, resulting in the establishment of a price, this price is usually expressed in terms of some one commodity selected for that purpose and known as a standard of value. If this standard is used in direct exchange for other goods it may be termed money. In that capacity it has usually or sporadically the functions of standard of values, standard of deferred payments, medium of

exchange, store of value, and others which may be regarded as derivatives of these.

4. When a commodity is transferred by its maker or owner to another trader, but without any direct payments, the transaction is said to involve credit; and a credit transaction may be defined as an uncompleted or deferred exchange or as an exchange not yet closed. Eventual closing of the exchange may occur through transfer to the original seller of other goods in an amount or quantity satisfactory to him. A credit transaction may, however, be stated in terms of money and be closed by the return of a specified quantity of money regardless of the power of such money to command other commodities.

5. When a trader both buys and sells on credit, holding himself liable to those with whom he deals for the net balances due them, he has assumed a general credit relation to the community, or, in other words, he is carrying on credit transactions with the public as a whole. Such transactions constitute banking, which is the process of generalizing credit, clearing or canceling it, and so effecting the final exchange or redistribution of goods. In commercial banking the banker carries on his dealings solely in terms of money and usually assumes the obligation to furnish money to any customer on demand up to the amount of the latter's net claim.

IV. Banking Viewed as a Phase of the Theory of Exchange.

In the past there has been a disposition among writers on the subject to deal with banking as if it were in some way an expansion or application of monetary theory. There would seem to be little justification for this view. Banking might exist much in its present form without any dependence upon the

use of money, while theories of money have comparatively little bearing, except in an indirect way, upon theories of banking. The practice of viewing banking as a phase or development of monetary science has tended to narrow the discussion of the subject and to prevent the application of those general economic ideas with which it is properly to be grouped.

When banking is thought of as a specialized mechanism for the exchange of goods, and when the theory of banking is viewed as a phase or element in the general theory of exchange, the underlying principles which apply to it become clear. They are essentially the same as have been explained by the economists in their analyses of exchange. In this aspect they are, therefore, familiar, and need no detailed review further than the mere reminder that the basis for a sound understanding of banking is found in the analyses of value, particularly of exchange value, which have been recognized by economists.

V. Development of the Credit System.

Viewing banking theory as an element in general economic theory, the reason for the development of banking as a mechanism likewise becomes plain. It is the outcome of the experience of other methods of exchange. In the early history of civilization, there was a long period during which the principal exchanges were effected by means of barter. This period was followed by another during which money exchanges came in to supersede barter to a very considerable extent. Within comparatively modern times a credit system has succeeded the systems of ancient and mediæval times. It should not be understood from what has been said that these periods of barter, money, and credit exchange are sharply marked off from

one another, or even that they shade into one another by imperceptible degrees. On the contrary, the facts in the case seem to show that there was extensive overlapping, and that fairly advanced ideas of credit were developed quite early in the period of money exchanges, while barter, as is well known, has persisted in many parts of the world down to modern times and has even been broadened and confirmed since the close of the European war because of the inadequacy of the money and credit systems of Europe, as seen in the shipment of materials from the United States to Europe and the return of finished goods made from such materials in payment therefor. There are thus no distinct "periods," in the chronological sense, which may be marked off from one another as indicating the duration of the systems of barter, money, or credit. It is possible to speak of "periods" in this connection only in the sense that the predominant characteristic or controlling method of exchange employed at any given time may be said to have been that of either barter, money, or credit. Speaking in this restricted sense, it is fair to regard the sixteenth century as a period characterized by a wide use of money, while the nineteenth century and the beginning of the twentieth, particularly the years after 1850, was essentially a credit period, and accordingly a period in which banking was brought to a development which had previously not been known.

VI. Credit as a Form of Exchange Without Money.

The term credit has already several times been used and a credit transaction has been incidentally defined as denoting an uncompleted exchange. Since modern banking proceeds upon a money basis in the sense that the banker obligates himself to pay money on demand, the practical current definition to be given to credit

should be that of exchange in which no money passes, or as a form of exchange which is conducted without the use of money. Objection may be made that this would admit barter transactions which in no sense are credit operations. If, for example, A exchanges skins for grain which has been raised by B, the transaction is closed when the exchange takes place, and no money has intervened. Narrowly speaking, therefore, primitive barter of this kind would be included within the definition of credit which has already been suggested. A means of further safeguarding the definition might be found by introducing the so-called time element and regarding credit transactions as those that are closed only after the lapse of a certain length of time. Indeed, many writers on the subject regard the time element as the essential or characteristic feature of credit. This does not seem to be a well-warranted view of the case. As will be seen at a later point, many transactions which result in an immediate closing of obligations contain no time limit, as, for example, when A purchases goods from B and pays B with a check on his bank. This, as will be seen in later pages, is unmistakably a credit transaction, yet it involves no postponement of settlement as between A and B. Recognizing the possible difficulties to which the definition is thus open, the idea of credit as a system of indirect exchange or exchange without money—hence, at any given moment uncompleted exchange—is accordingly adhered to.

VII. Definition of a Bank, Banking System, Credit System.

A commercial bank, for the purposes of the present discussion, is an institution of credit or an institution whose purpose it is to facilitate or effect exchanges

without the use of money. Every bank maintains a money reserve and has money transactions over the counter. It is not true, therefore, that it carries on its business without the use of money, but merely that in practice it reduces the use of money to a minimum. Nevertheless, it remains entirely true that the object of the bank is to facilitate exchange without the use of money—that is to say, to provide or furnish credit as a means of exchange. It is a credit institution.

Banking and credit are thus the two correlative ideas whose analysis and treatment should proceed together. The ideas of money and monetary science should, so far as practicable, be dissociated from the discussion in its early phases. They have a bearing upon it which will be referred to at a later point, but that bearing is only incidental.

By a banking system is meant the relationship which exists between banking units or institutions, and in some cases the mechanism of general control or union between banking units which has been established by law. From this standpoint, banking legislation or banking enactments constitute an important element in the banking system as such.

By a credit system is ordinarily meant that whole mechanism for exchanging goods without money which exists in any community. The banking system is the nucleus of, or central element in, the credit system. There are many credit transactions which take place without the aid of banks, but the banking organization of the country furnishes the underlying means of liquidating credit and of settling outstanding obligations.

VIII. Commercial and Investment Banking.

Banking may be recognized as distinguished into two separate branches—commercial banking and in-

vestment banking. By commercial banking is meant that phase of banking which has to do with short-term credits—credits based upon or intended to provide for the exchange of goods. By investment banking is meant banking which has to do with credits whose purpose is the development of production. Through it capital goods such as machinery are brought into the hands of those who will use them for productive purposes as well as goods which are merely destined for resale by the buyer. It thus also serves to supply business houses with the permanent capital they require, while commercial banking merely supplies those houses with this working capital which they need for temporary purposes and expect shortly to repay. Both investment banking and commercial banking thus bring about a redistribution of the capital in existence, though they do this in different ways and for different purposes.

CHAPTER II

CREDIT AND BANKING

I. Differences Between Direct and Indirect Exchange.

Accepting for the moment the definition and analysis of credit, furnished in the foregoing chapter, the question now presents itself, How does a credit system operate or in what way does it differ from a system of direct exchange? It is clear that the essential difference between such direct exchange and the credit or indirect type of transfer is found in the fact that the parties to the transaction have not realized the values growing out of it, so that in every such transaction there is:

1. Uncertainty of actual or eventual settlement, which raises a question of security.

2. Uncertainty of payment in, or convertibility into, money, which raises a question of what is called liquidity or liquidating power.

II. Classes of Credit.

Writers on credit enumerate various kinds or species of credit, including:

1. Personal credit. This is currently taken to mean credit which effects the transfer of goods or money to an individual on his mere assurance and without security.
2. Commercial credit. This is probably the broadest and vaguest term currently used, but is

frequently taken to mean credit represented by all grants of time within which to settle for merchandise bought at wholesale for resale or manufacture.

3. Mercantile credit. By this is usually meant credit which effects the extension of accommodation by retail merchants to their customers (consumers).
4. Bank credit. By this is usually signified credit represented by loans and discounts by banks without regard to use.
5. Public credit. By this is ordinarily indicated credit represented by the advances secured by treasuries through sale of bonds and certificates of debt.

Credit here is defined by the writers referred to as operating in three ways: (1) as a transfer; (2) as a grant of time; (3), (4), (5), as a loan, accommodation, or advance. Upon analysis, however, it will appear that the credit transaction is at bottom the same in these classifications, and that the distinguishing elements or points of difference in all cases center about the two questions already referred to, the various classes of credit presenting special problems under these two heads. In each class or kind of credit the questions at issue are simply these: Will the recipient or beneficiary of the credit finally close the transaction as agreed by giving value in settlement; and are his transactions of a kind that will enable him to complete the transaction as expected? The process of measuring, testing, judging, or apportioning credit is a process of determining the degree of uncertainty on these two heads that is present in any given transaction.

III. Classes of Credit on Basis of Time.

There is a classification of credit less popular than that just given which presents a special problem deserving of notice. By some writers credit is classified on a time basis thus:

1. Long-term or investment credit.
2. Intermediate or productive credit.
3. Short-term or commercial credit.

The distinction sought to be established here is a good deal more subtle than that which is suggested in the earlier descriptive classification. The underlying thought in it is that the term or period for which credit is granted deeply influences the character of the use to which the goods are put. Thus if A asks for a ten-year loan, it is because he wishes to build a house, exploit a mine, or provide a permanent supply of working capital. If, on the other hand, B borrows for thirty days, he can have no intention of building, mining, or developing a property. He probably borrows in order to buy ready goods for a quick turnover or to meet obligations which are falling due, expecting to settle with his creditor out of current funds to be paid him within the month's period for which his credit runs. Accordingly, say the advocates of this view, the time element is the real or true determinant of the character of credit. Long-term is essentially different from short-term because of the different character of the purposes served by it.

The points raised with regard to the different ends served by long and short term credits may be freely accepted without altering the analysis already given with respect to the two main points always to be considered in measuring or granting credit. There is, however, a matter involved in this classification which

must receive at least passing notice. This is the fundamental question already briefly considered, whether credit is essentially a question of time at all.

IV. Analysis of Time Element in Credit.

In the theory of credit which is popularly accepted by the greater number of men in business, the idea of credit is undoubtedly associated with that of time. The borrower thinks of credit as a means of postponing the date of making an actual payment. Thus he speaks of credit extended for thirty or sixty days by a bank, or he says to his customer that the goods may be taken on a credit of ninety days. This concept of credit as simply a means of postponing the date of settlement is closely associated with the view of credit as a loan of money. The money is conceived of as being "borrowed" for a definite period during which it is used in some productive occupation resulting in a profit. These ideas also appear in a more or less modified form in much of the theoretical writing found in economic works on capital and interest. Indeed, the postponement of consumption has been by some given as the real reason for the payment of interest. An owner of capital or goods is conceived of as desiring to consume immediately the articles of which he stands possessed, as being induced to postpone his consumption of them by the payment of interest. The act of transferring the goods or wealth, or in some cases the "money," to the "borrower" is viewed as a grant of credit. Time, in short, is almost universally treated as a cardinal factor in the granting of credit.

It may be questioned whether this view affords a sound analysis of credit, as seen in connection with banking operations. Without attempting to discuss

academically the theory of interest, one or two considerations bearing upon credit are worthy of special note. We have already defined the bank as a credit institution, or institution of credit, and we have seen that if A has a deposit on the books of the bank against which he draws, a check so used is spoken of constantly as a credit instrument, and the transfer made is a transfer of bank credit. From another part of our analysis, it will be plain that the service performed by the bank in granting credit is that of examining or testing the borrower's assets and business record as shown by his statement of condition. Accepting these views of the character of credit for the moment, a doubt is raised whether the service of the bank is actually a service which necessarily involves the element of time. It may easily be that a customer of a bank obtains an advance from it which he at once transfers to another depositor. The outcome of the transaction then is to shift the credit on the bank's books from A to B, and so long as B carries it without using it it may be conceived of as a time advance. Even though A has parted with the credit immediately upon getting it, the bank still continues to be obligated to meet it. On the other hand, B, when he received the transfer from A, may have used it to settle a previously existing debt to the bank, so that the credit is almost immediately canceled.

V. Bank Credit as a Mechanism of Exchange.

Suppose we generalize this view of credit, remembering that the total amount of bank obligations is fairly stable, and that, though it may increase for a period of months at a time, this upward movement may be followed by a like period of decrease. It is certainly not an unfounded or violent supposition if we regard the

total volume of bank credit as practically stable over a considerable period. This does not mean that no new credit is granted. It merely means that about as much is being canceled as is being granted. Looking at bank credit in the aggregate, then, it is not an "extension" of loans or accommodation, but it is a steady, consistent, more or less uniform means or machine used in bringing about the exchange of goods. With a certain existing level of prices and volume of business, a given volume of bank credit is brought into existence or, in other words, a given number of solvent borrowers present themselves to banks with requests for accommodation. They obtain the advances they want and transfer them to others who use them in canceling already existing obligations. If it be supposed that the banking system of a country is practically permanent, then the outstanding minimum level of bank credit may also be regarded as practically permanent. It is a permanent mechanism of exchange and not an "advance" which is to be repaid at any given moment. From this standpoint the element of time seems to figure but little in the fundamental analysis of bank credit transactions.

If bank credit is not primarily dependent upon the idea of time, what is the characteristic service performed by the bank which permits the institution to make a charge for the work it does? This is not a service of "lending" at all in the ordinary sense, but is a service of insuring or guaranteeing the existence of values. The essential function of the bank is that of making sure that given individuals may safely transfer values to others. The bank enters in as a buffer between the buyer and seller. It takes the risk, and the amount which it charges for this service is more nearly in the nature of an insurance premium

than it is of a payment for "abstinence" from the immediate use of "money" or even of "wealth."

VI. Relation of Bank Credit to Money.

Bearing this view of bank credit in mind, it becomes necessary to refine upon some of the commonly accepted ideas of the nature of bank credit and particularly of its relation to money. It is seen at once that the "credit" furnished by banks is an independent medium of exchange, and that while the bank has an important and significant duty to perform in converting claims upon it into money when demanded, this is only an incident of its general work. The money-furnishing or money-transferring business of a bank is not its most important side, and as the bank increases in the scope of its operation the proportion of its transactions which consists in the furnishing of money tends to decrease. When reserve banking is introduced the relation of the bank to money becomes still more remote. The bank then no longer keeps reserves in money for the purpose of paying its customers, but it transfers this function to the central bank and devotes itself primarily to the duty of passing upon applications from its clientele. These applications, although stated in terms of dollars, and although they appear as requests for loans, are really requests that the bank should credit on its books a percentage of the assets which "borrowers" can command, in order that the latter may readily use these values in buying and selling and in production. This gives the bank a status as an active element in business, which it does not possess as long as it is thought of merely as a kind of pawnbroker or, at best, as the highest type of money lender.

VII. Functions of a Bank.

1. Recognition of Right to Credit.

The view thus given of bank credit in general furnishes the key to the view which should be taken of the bank itself. It is, as we have already seen, a credit institution—an institution for the investigation, discussion, and recording of credits. It is not, in this aspect, what some have described it, an enterprise for "manufacturing" credit. The "manufacture" of credit, as clearly appears from what has already been said, is impossible. A basis of credit is automatically created whenever real buying power or value is in process of being brought into existence. Such power is created during the expenditure of labor and capital, but the real worth or value is often intimately associated with the other elements that appear in the general operations of his concern. The basis only appears when it is dissociated from the other elements in the aggregate of goods and expert means are needed to recognize it. The first function of a bank, then, is that of recognizing through scientific analysis the real nature and amount of the values which are presented. Fundamentally, therefore, the credit department of a bank is the basic element in its organization. It is true that in the past many banks have been able to do without credit departments and that at the present time there are not a few of them—chiefly the smaller and less advanced types of institution—which have no credit departments, or only very rudimentary organizations of the sort. These, however, usually accept the work of credit departments operated by their city correspondents. The true work of a bank credit department is done whenever any loan is made. It may be that the work of credit analysis is incidentally performed by the president or a vice-president of the

bank or by some other officer who happens to have charge of the work of lending, but the function is there.

2. Guaranteeing of Values.

Secondly, the bank, after recognizing or analyzing credit, guarantees it. It does this by substituting its own credit for that of the "borrower" or owner of wealth. If A, for example, is producing steel from pig iron, the bank ascertains the value of the products which he has in process, which, we may say, is $25 per ton. It undertakes to loan, say, $10 per ton, and in order to carry out its part of the agreement it obligates itself to pay $10 on demand to anyone who may be designated by the owner of the plant. The owner leaves with the bank his own note, which may be secured or may be simply a claim upon his general assets. In either case, however, the loan is made on the strength of existing value. It represents that part of the value of the product which the bank is willing to guarantee. The bank does not expect to be called upon to meet this obligation for $10 per ton. On the contrary, it expects to offset the obligation against other claims, and as a net result it believes that it will not be called upon to reduce its holding of specie. That, however, is to be determined at a later time. The bargain which the bank makes when it enters into relationships with the borrower involves the substitution of its own obligation for that of the owner of the goods, and this is the essential point in the whole operation.

3. Transferring of Titles.

Thirdly, the bank not only undertakes to put its obligation in place of that of the borrower, but it undertakes to keep this obligation steadily redeemable on demand in money, or in lieu of such redemption, to shift the "credit" from A to B and from B to any

other that the latter may indicate, through a process of bookkeeping which involves the receiving, recording, and paying of claims drawn against the total credit which has been allowed. Closely connected with this function are the subordinate duties of exchange and remittance, which, as will be seen at a later point, are variants of the same general function.

VIII. Banking as a Form of Credit Mechanism.

It thus appears that, in its pure form, banking is essentially a study of credit, a process of insuring such credit, and the transfer of titles thereto. It is partly a process of scientific analysis and partly a business organized for pooling or distributing risks. Most of the risks incurred turn out favorably to the banker. Some do not, and the loss which results from this minority of risks is borne by the banker out of his profits on the other operations he has undertaken, or at times out of his capital. In one sense, therefore, banking is credit insurance, and in another sense it is credit recording and credit transfer. Its relations to money, the holding of funds, the payment of checks, dealings in specie, the issue of notes to take the place of coin, and many others are merely incidents. They have developed as the outgrowth of the banking business. Many of them are necessary to the convenience of the public; others may be better performed by some other types of institution and will eventually be transferred to such institutions. The essential function of banking remains and is basically necessary in any society which is developed upon a footing of division of labor and exchange of values. In such a society credit must be had by those who produce goods that are not immediately consumable or instantly salable. The bank makes this credit available. Banking is therefore

a part of the credit mechanism of society, and, since the latter is essential to any advanced development of business or industrial life, banking is also essential thereto. Banking, however, does not develop business or ordinarily precede the division of labor, but succeeds it. It is not a profession or occupation which initiates, but one which follows. In this aspect it may be classed in some measure with railroad transportation. True, a railroad may be built through an uninhabited country and its owners may then await the slow development of freight. In the same way the bank may be built up in advance of the business enterprise which will give it full occupation. These, however, are pioneer activities which must be regarded as the exception and not the rule.

What has been said thus far is, as has been made clear, applicable solely to what is called commercial bank credit—the extension of credit or the making of loans by the creation of deposits and the issue of notes. This is a typical method of bank operation in so far as relates to what, for want of a better term, we call commercial credit—the credit which involves the exchange of goods or the application of funds to the process of making them ready for consumption over very short-term periods.

IX. Investment Banking.

It has been pointed out, as a reason why the theory of credit cannot be regarded as final or absolute, that this "short-term credit" is not capable of exact definition and that what is short term in some countries may be long term in others, and vice versa. It has also been noted that the time element as a test of the character of credit is unsatisfactory, and that the better way of discriminating between types of credit is that

of relating them not to time as a standard, but to the use that is made of the proceeds. Looking at the subject from that standpoint, another branch of the analysis of credit must be devoted to what is termed investment or long-term credit, by which, as already seen, is meant the conversion of consumption goods or circulatory funds into capital goods—that is to say, the establishment of income-producing properties. The essential distinction between this type of credit and the kind of banking which provides it (ordinarily known as "investment banking") may be made evident by a simple illustration. A is a farmer who wishes to drain his land and fence it. He applies to a trust company or investment institution for a loan to enable him to perform the work. This institution has received from a number of persons—X, Y, and Z—funds which have grown out of their savings. X, Y, and Z, we may suppose, are salaried men each of whom had at the end of the year found himself possessed of, say, $1,000. Each has deposited this sum in the trust company. This means that the trust company has given them a claim upon it which may be exercised in the purchase of actually existing goods. X, Y, and Z, for instance, might take their funds and with them buy clothing, automobiles, or consumable goods of any kind. They have not done so, but instead they wish to transfer this consuming power to some one else who will pay them a return on their ownership. The trust company decides to lend the $3,000 to Farmer A, and does so, charging remuneration for its service in investigating and making the loan. X, Y, and Z have now become creditors of the farmer upon, let us say, a five-year mortgage. The farmer with his $3,000 in hand uses the funds in employing labor—that is to say, he gives the "money" to laborers, who use it in supporting themselves. Viewed

from another standpoint this merely means that the laborers have received the money and have used it in buying clothing, food, etc., so that they, and not X, Y, and Z, have enjoyed and used up these consumable goods. Their labor has resulted in improving the farm, and as a result the farmer is able to produce a larger crop yield. A part of this crop yield he pays to X, Y, and Z as "interest." In effect, then, the long-term credit function is a process of converting immediate titles to goods into productive machinery or income-yielding opportunities.

X. Commercial and Investment Credit Differentiated.

A difference between this kind of credit operation on one hand and commercial credit on the other may be found in the fact that whereas reimbursement or liquidation of commercial credit comes from the interchange of existing goods or goods which are on the point of being rendered consumable, investment credit may eventually be liquidated as a result of savings made through the increase of productive power. Both interest and principal will be repaid to those who have advanced the current funds only as a result of a real increase in wealth resulting from the productive operation. It is evident from this analysis that the operations which are covered by the term investment banking rest upon a very different basis from that which is usually included under the term commercial credit. The function of the investment bank or credit institution is that of accumulating units of savings or current funds whose owners are willing to allow them to be converted into investments—productive or income-yielding opportunities. The difference between such credit and that furnished by the commercial bank is

ordinarily spoken of as being one of time, but, as has already been frequently indicated, the essential difference is not that of time, but rather of the use that is made of time. It is a difference in the character of the enterprise that is undertaken. The characteristic enterprise undertaken with the use of commercial credit is that of bringing together consumers and producers, while the characteristic enterprise undertaken by the investment institution is that of bringing together producers and those who desire income rather than immediate enjoyment of capital. This is a difference which, as will be seen, involves broad and fundamental differences of method in banking and far-reaching differences in canons of judgment as to banking soundness or liquidity.

CHAPTER III

CREDIT INSTRUMENTS

Credit in the sense in which it has already been defined as a means of exchanging goods has to take some definite form. Although credit itself is intangible, in actual practice it assumes a distinct shape. The form in which credit is represented in ordinary business life, or from another point of view, the forms of credit, or still in other words, tangible evidence of credit, are what are known as credit instruments. Credit instruments may be broadly defined as evidence of obligations between the individuals who are parties to them. They present a variety of aspects, and since they have been the product of gradual business development, they are naturally different both in form and in legal status.

I. Commercial Credit Instruments.

1. Open Book-account.

The most elementary type of credit instrument may be said to be the open book-account. A sells goods to B and debits him with the value of these goods, or in the current phrase "charges" them to him. A necessarily carries some kind of account books which, in the event of necessity, can be produced and which contain entries to show the amount of goods he has transferred to B. Such books are records, having, of course, only the validity which they acquire from the fact that they are entries made in good faith at the

time of the transaction to which they refer. Ordinarily they present no evidence of having been acknowledged by B. Nevertheless, they are in a sense a credit instrument—that is to say, they are a means of recording or measuring credit, or of furnishing evidence that it has been extended. The idea becomes more fully developed when we conceive of both A and B as keeping records, each perhaps purchasing from the other, and their records, therefore, agreeing substantially with regard to the amount of goods given and received. If at the end of a fiscal period they exchange receipted statements, these are evidently elementary credit instruments, and present on their face evidence that the transaction indicated by the charges to account has been completed through the transfer of an equal amount of goods, or through some other form of credit. Such receipted statements are a derivative of the books of record of the concern, and may be regarded in an even fuller sense than the former as being credit instruments.

2. Promissory Note.

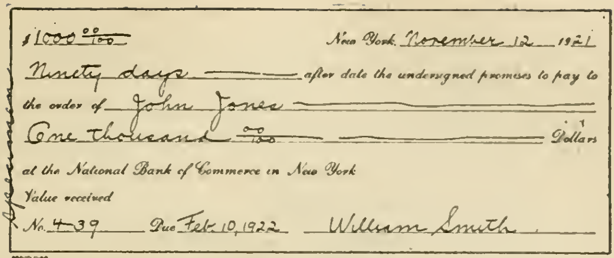
Another step in the direction of the credit instrument is taken when the recipient or buyer of the goods gives to the seller an acknowledgment that they have been received. This might conceivably be nothing more than a receipt for the goods—a signed statement that he had received a given number of bushels of wheat or yards of cloth of a certain kind. Examples of this sort are seen in the warehouse receipt which plays so important and growing a part in business to-day. A cotton warehouse receipt, for example, is merely the acknowledgment of the warehouse operator that he has received from his customer a given amount of cotton of a specified grade and is holding it for him. A still further step is taken when the receipt specifies

the value of the goods—B, for example, certifying to the receipt of a given number of bushels of wheat at $1 per bushel. Since in this instance B has acknowledged receiving goods of a specified value, it is inferred that he has obligated himself to settle for or liquidate the obligation in an equal amount. A final step may be taken when B does not specify the kind or character of the goods received, but merely acknowledges himself to be indebted in a specified amount for "value received." In this case a full-fledged "credit instrument" has been worked out. It is what is ordinarily termed a note, and constitutes a legal obligation on the part of B to pay A a given number of dollars—that is to say, to return to B value which is represented by a given sum in dollars, although A may, if he choose, exact an actual settlement in money.

3. Bill of Exchange.

Exactly the same result might be reached by a somewhat different route, giving rise to a rather different type of credit instrument. If A, when he sent the goods to B, had drawn upon the latter by issuing an order to him to pay a specified sum either to A himself or to some one else at a given date, this order would have been called a "draft" or bill of exchange.

Bills of exchange may be classified according to the party on whom drawn or the time when payable. If drawn on a person, firm, or corporation, they are called trade bills, and if on a banking institution, they are described as bankers' bills. They are termed sight drafts if payment can be demanded on presentation, or at a fixed time after sight, and time bills if they mature on a specified future date. The term "acceptance" may have several meanings and therefore requires explanation. In the first place it may refer to the act of the drawee in writing across the face of


$1000 00/100 New York November 12 1921

Ninety days after date the undersigned promises to pay to the order of John Jones

One thousand 00/100 Dollars

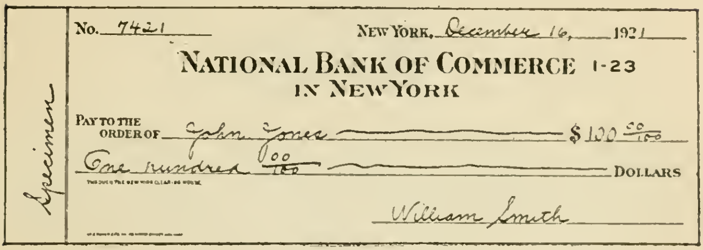
at the National Bank of Commerce in New York

Value received

No. 439 Due Feb 10, 1922 William Smith

Specimen

PROMISSORY NOTE


No. 7421 NEW YORK, December 16, 1921

NATIONAL BANK OF COMMERCE 1-23
IN NEW YORK

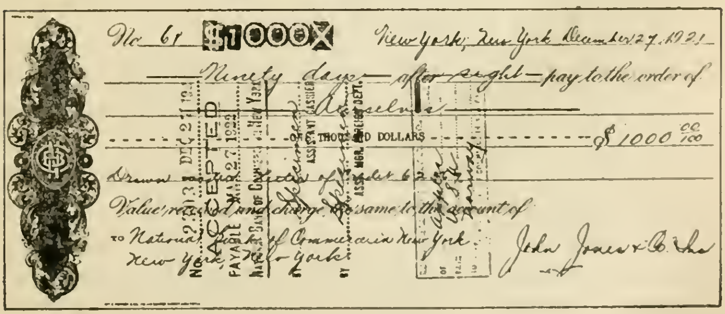
PAY TO THE ORDER OF John Jones $100 00/100

One hundred 00/100 DOLLARS

William Smith

Specimen

BANK CHECK


No 61 $1000 New York, New York December 27, 1921

Ninety days after sight pay to the order of Ourselves

ONE THOUSAND DOLLARS $1000 00/100

Drawn under Letter of Credit 62

Value received and charge the same to the account of

TO National Bank of Commerce in New York
New York, New York John Jones & Co. Inc.

ACCEPTED

BANK ACCEPTANCE

TYPICAL CREDIT INSTRUMENTS

the instrument a formal acknowledgment of the order addressed to him by the drawer and an agreement to pay the obligation at its maturity. The term acceptance is also applied to a time bill of exchange which has thus been duly accepted. This use of the expression "acceptance" is found in commercial practice, but is not recognized in law.

In a more restricted sense, acceptance is the expression inscribed on the bill by the acceptor. It may be written simply as follows:

Accepted
July 1, 1921.
William Smith.

This form is described as unqualified acceptance, for the drawee agrees to make payment at the time, to the parties, at the place and in the amount specified on the face of the bill. The acceptance written by the drawee is said to be "qualified" when it differs in any way from the order addressed by the drawer. The above acceptance may be qualified in any one or more of the following ways:

(1) Time. The bill reads "payable thirty days after sight," but the acceptor extends the time to sixty days after sight.

(2) Parties. The draft is drawn on Jones and Smith, but Smith alone accepts.

(3) Place. A draft is payable at the acceptor's business office, but the place of payment is restricted by an acceptance, reading, "Payable at the X Bank only."

(4) Amount. The bill is drawn for $1,000, but the drawee acknowledges only $800 and not the full amount.

4. The Check.

The credit instruments which we have spoken of thus far have been, as already seen, evidence of obligations growing out of the transfer of goods between individuals and giving rise to obligations stated either in terms of goods or in terms of money. There is no reason, however, why the transaction should not be an operation in money throughout. For example, if A advances to B a title to money or money itself, he may simply charge B with the amount on his books, or if B "deposits" money with A, the latter may simply credit the former with the amount. When a bank does this it enters the amount thus deposited in a deposit book or bank book which is presumably a duplicate of B's account as carried on the books of A (in this case the bank), and which thus acts as a kind of receipt or voucher, or, as we have learned to call it, a credit instrument. Suppose now that B, desiring to withdraw some of these funds from the custody of A, directs A to pay them out in cash either to himself or some one else, or to transfer them on his books to the credit of some one else, a written instrument will be needed for this purpose, which is nothing more than an order to A to pay or transfer the credit obtained by B. This is called a draft or check. When the transaction in question occurs between an individual (B) and the bank (A) the term "check" is universally employed, and the check is in the fullest sense of the term a credit instrument.

II. Legal Aspects.

In commercial usage the term bill, or bill of exchange, is practically synonymous with the draft or accepted draft. Where the words notes, drafts, and bills of exchange are used, the term "notes" covers direct

obligations between persons of the kind already referred to; the term "drafts" usually means orders drawn upon a bank or by one bank upon another, while the term "bills," or bills of exchange, is used to include drafts, whether accepted or unaccepted, growing out of transactions in goods.

Lawyers usually apply to the economic class of credit instruments the term "negotiable paper." Negotiable paper is not exactly identical with credit instruments, the concept of the lawyer being rather different from that of the economist or of the individual business man. Works on legal relationships and commercial paper usually state that there are to be included under the term "negotiable instruments," or "negotiable paper," checks, drafts, and bills, the last named being either accepted or unaccepted. Negotiability is defined by lawyers as the power to transfer title absolutely and without the necessity of notice incurring liability on the part of the recipient. For example, if A gives B a check, B may indorse the check and transfer it to C ,who may then cash it without paying any attention to the question whether B had come by the instrument lawfully or whether he was indebted to others who may have been conceived to have a prior claim or not.

The parties to negotiable paper are said to be the maker or drawer, the drawee, and the various indorsers. Thus if A borrows $500 from B and gives B a note for $500, A is the maker of the note which evidences the transaction. If, however, B draws on A for $500, B is the maker or drawer of the draft and A is the drawee. If B then accepts the draft he is the acceptor. A party who comes into possession of an instrument before its maturity through legitimate means, and with the belief in its legality, is known as the "bona-fide holder" or "holder in due course."

1. Conditions of Negotiability.

Since credit instruments are the means of making payments, they must possess certain characteristics which enable them to pass freely from hand to hand. In the United States, these features are summarized in the Negotiable Instruments Law as requiring that a credit instrument

"1. Must be in writing and signed by the maker or drawer;
2. Must contain an unconditional promise or order to pay a certain sum in money;
3. Must be payable on demand or at a fixed or determinable future time;
4. Must be payable to the order of a specified person or to bearer: and,
5. Where the instrument is addressed to a drawee, he must be named or otherwise indicated therein with reasonable certainty."

Thus the essential conditions of negotiability relate to the general nature, parties, and payment of the instrument.

Although a credit instrument is in the nature of a contract, it must always be in written form. An oral obligation to pay money would not be a tangible evidence of the debt and so could not be transferred from one party to another.

Further, the instrument must be specific in its reference to all parties. The maker must affix his name to the instrument, otherwise he cannot be held liable for an obligation which he has not signed. The signature must be a true one, since the holder of a forged instrument has no claim against a party whose name has been thus misused. Although the instrument must indicate a payee, this does not necessarily

mean that the name of the individual payee shall be specified. An instrument reading, "Pay ten dollars to John Smith," is nonnegotiable in form, while, on the other hand, "Pay to bearer" is negotiable, since any holder for value may claim payment. The instrument may be addressed to a definite payee or his order as, "Pay to the order of John Smith." Forms which are payable to bearer or to order are negotiable, for they indicate an intention on the part of the maker or drawer to become generally liable not only to the person named, but to unknown persons into whose hands it may pass, while in the case of an instrument not payable to order or bearer the maker or drawer contemplates liability only to the payee specified.

A negotiable instrument must also definitely determine the manner of payment. All credit instruments contain either an order to pay, as in the case of check, or a promise, as in the note. This order or promise to pay must be absolute and in no way conditional. For example, a note in which the maker agrees to pay one hundred dollars "out of the next dividends of the United Textile Corporation" would be nonnegotiable, for its payment is contingent on the action of directors who may or may not declare dividends. Because a negotiable instrument performs a function similar to that of money, the promise or order must be payable in money and in an amount that is certain. An order to pay 100 shares of United States Steel would not be considered a negotiable instrument. Although these securities are readily sold on the market and easily converted into cash, still they possess a value which is continually fluctuating, and so is not certain in amount. Payment must, therefore, be made in legal-tender money, which means United States currency. If so specified in the instrument, payment may be effected in another currency, such as the German mark, even

though the value of this unit in terms of the dollar varies from day to day.

There must be no uncertainty as to the time of payment. If payable at sight, the obligation becomes due upon presentation, but if at future time, this date must be fully determinable. "Sixty days after death," "on or before July 1, 1921," are both determinable periods of time, and in fact "six months after my death" also is an ascertainable date, for it follows after an event which is inevitably bound to happen. However, a promise to pay money "when A is twenty-one years old" is nonnegotiable, for A may never attain this age.

2. Indorsement.

The correct procedure of negotiating an instrument follows certain legal principles which have been gradually developed by commercial usage. An instrument which is payable to bearer may be negotiated by a holder in due course merely by transferring it to another party, and this act is known as delivery. But if the document is payable to the order of a specified individual, the holder must indicate the surrender of his title by writing his signature upon the reverse side of the instrument. This act is known as indorsement. Therefore negotiation is accomplished either by simple delivery or by delivery and indorsement. The payee who performs the act of indorsement is called the "indorser," and the party to whom title is transferred is known as the "indorsee."

Indorsement may serve another purpose in adding to the strength of an obligation. If A gives B a promissory note, it may be further strengthened by having C add his indorsement. Thus C gives his conditional promise to reimburse B in the event of refusal on the part of A.

The various forms of indorsement may be classified in respect to parties mentioned or qualifications stipulated. As to parties, indorsements may be either "special" or "blank." A special indorsement states the name of the indorsee, as, "Pay to the order of John Smith," who alone can further transfer the instrument. When the indorsee is not designated, the form is called a blank indorsement. The instrument may then be negotiated by any holder upon mere delivery, for no further indorsement is required. This form may well be used in depositing a check with a bank. The depositor who signs a blank indorsement thus allows his bank complete freedom in securing payment of the check, for the funds are payable to any holder.

Classified on a different basis, indorsements are either unqualified or qualified and restrictive. The illustrations given above are both unqualified, since they contain no statement which limits the free negotiation of the instrument. A qualified indorsement transfers the title of an instrument, but at the same time exempts the indorser from the usual liabilities which result from this act. To accomplish this purpose, the indorser writes before his name the expression "without recourse," and thus serves notice on any holder that he cannot enforce his usual claims against the indorser if the original drawee refuses to meet his obligation. An instrument may be qualified in another way by placing upon it a restrictive indorsement, such as the following: "Pay to the X Bank for collection." The indorser thus names the bank as indorsee for a specific purpose, which in this case is to secure payment of the instrument. The consequence of this form of indorsement is to end the negotiability of the instrument, for the indorsee is prohibited from further transferring it.

3. Presentment.

Having now described the meaning and classification of indorsement, it is necessary to consider next the effect of this act on the various parties to a negotiable instrument. The bona-fide holder has the right to press his claim for full payment against the other parties to the instrument. These persons are not liable in the same degree, and may be divided into two classes. The first group includes the maker of a promissory note and the acceptor of a bill of exchange, who are both absolutely liable to the holder for payment and are called the primary obligors. The second group includes the drawer of a bill and the indorser of a bill or of a note, who are merely under a conditional or secondary obligation, for they will be called upon to pay only if the maker or the acceptor has refused to meet the claim of the holder.

When a holder of an instrument brings notice of the obligation to the parties primarily liable, this act is known as *presentment.* A demand obligation such as a check is presented in order to obtain payment, and a bill of exchange which is due at a future time is presented to the drawee for his acceptance. Presentment is merely the exhibiting of the instrument, and the actual request for payment or acceptance is known as demand. The purpose of presentment and demand by the holder is to secure payment from the drawee or maker, and also to fix the liabilities of the parties secondarily obligated.

Correct procedure must be observed, otherwise the holder may forfeit claims against drawers and indorsers. Both presentment and demand must be made at the correct time and place. A demand obligation should be presented within a reasonable time after its issue. In the case of a check this may be interpreted to mean

within twenty-four hours if the holder and the drawee bank are both located in the same city. But if the holder delays the presentment, and if in the meantime the bank fails, the claim against the party who first drew the instrument is terminated. Time instruments must be presented for payment on the day specified. If, however, this date happens to fall on a Sunday or legal holiday, presentment is made on the following business day. Presentment for both demand and time instruments should be made within business hours, which in the case of a bank would mean between nine o'clock in the morning and three in the afternoon.

The place of payment depends upon the wording of the instrument. If the place of payment is designated as at the X Bank, it is there that presentment must obviously be made. If no address is given, it is understood that the instrument shall be presented at the obligor's place of business or, if it cannot be found, at his residence.

If presentment is made to the obligor, and he accepts and later pays the instrument when due, negotiation is completed. If this party refuses to accept, or to pay after acceptance, the instrument is said to be *dishonored*, either for nonacceptance of a bill or for nonpayment of a bill or of a note which is due. When these primary obligors, whether drawee of a bill or the maker of a note, have refused to meet the demand of the holder, he first states the facts of the presentment and dishonor in a formal document known as a certificate of protest. He then turns to those parties who are secondarily liable for payment, and they may be indorsers or the drawer from whom the holder has received the instrument. It is the duty of the holder to give these persons a notice of dishonor. In this document he informs them that the instrument in question has been legally

presented at the proper time and place, but as acceptance or payment has been refused by the parties who were primarily obligated, the holder now looks for payment from the parties secondarily liable. If the holder of a dishonored instrument fails to notify the drawer or the indorser, these parties are thereby discharged from their liabilities. However, the indorser may yield his right to presentment, protest, and notice of dishonor, by writing before his signature the expression "Protest waived."

III. Investment Credit Instruments.

1. The Stock Certificate.

Consideration has thus far been confined to notes and bills, which are the fundamental instruments of commercial credit, but attention must also be given to investment credit instruments. As they are governed in general by the principles of negotiability explained above, it is necessary to analyze only the special characteristics of each class. Investment credit instruments are issued mainly by corporate organizations, and include the stock certificate, the bond, and the short-term note. A certificate of stock represents ownership of one or more shares or parts in an enterprise. If a corporation is organized with a capital stock of $100,000 this signifies the maximum amount which may be issued under its charter. In order to effect its sale the capital stock is divided into a number of shares. These may be given a definite face, or par value, as, for example, $100, and thus the above corporation with a capitalization of $100,000 issues 1,000 shares. Shares may also represent merely a certain proportion of the total capital stock, and since these are without par value, the money worth of such shares is determined by whatever price they will bring when sold on the

market. These shares with or without par value constitute the common stock of the corporation.

In addition, it may also issue preferred shares, constituting that portion of the capital stock which possesses certain preferential rights. In event of bankruptcy and liquidation, owners of the preferred stock may have a prior right to the proceeds of the assets before the holders of common stock, but preferred stock more usually has reference to prior claims over dividends of the corporation. In this respect preferred stock may be classified as cumulative or noncumulative. The former gives the holder considerable assurance of the ultimate payment of dividends, for, if omitted within a given time, they are carried over into the following period, and these arrears must first be paid before the owners of the common stock receive any dividends. Noncumulative preferred stock entitles the holder to first claim over profits within a certain time, but if earnings prove insufficient and there is a consequent lapse of dividends, holders of this class of preferred stock lose their claims, for the obligations are not continued into the next dividend period. In general, preferred stock, compared with common, possesses such advantages as greater degree of security and more regularity of income, but on the other hand it entails a limitation in possible profits, for its yield is usually of a fixed per cent, regardless of corporation earnings; while preferred stock is either cumulative or noncumulative, participating or nonparticipating as to dividends, common stock is always uniform in nature.

A stock certificate is not exactly a credit instrument. The holder is not a creditor of the corporation, but really a part owner, and therefore, in the event of insolvency, possesses no claim upon assets, but in fact he may even under circumstances be judged liable for losses in proportion to the amount of his stock if not fully paid.

In a way the stock certificate does partake of the nature of a credit instrument, for it is transferable through mere blank indorsement on the reverse side by the person in whose name it is issued.

2. The Bond.

A bond in every respect is an instrument of credit. It possesses practically all the features of a time note, for it is a promise by the maker to pay interest and principal at a designated time in the future. It is a promise written in a formal manner, for it is always under seal. As the bond may have a maturity as long as one hundred years, the maker is usually a government or a corporation, for neither an individual nor a partnership could have this expectancy of life. As the amount of the loan may aggregate millions of dollars, it is obviously impossible to borrow the entire sum from one person, and so it is divided into smaller denominations, usually of $1,000, $500, and $100 for each bond. It also bears a fixed rate of interest which is generally payable semiannually.

The bond, the same as any other promissory note, may be either secured or unsecured. The first type is secured by a mortgage in which the corporation conveys property to a trustee, who may take steps to sell it for the benefit of bondholders if the interest or principal is not paid. The corporation may thus pledge property such as terminals, factories, or stocks and bonds. The unsecured or, as it is usually called, the debenture bond, is based upon no tangible assets, but rests merely upon the general credit standing of the corporation. In the event of default, holders of such bonds cannot foreclose on any special assets of the corporation, for their only redress is to bring suit as creditors on notes which have been unpaid, and so dishonored.

The degree of negotiability of a bond depends on

whether or not it is registered. A registered bond is payable only to the party whose name is designated on the instrument and recorded on the books of the corporation. It can be transferred only by the indorsement of the payee and by the recording of this assignment on the ledgers of the corporation or its agents. While the registered bond is thus difficult to negotiate, this very feature may prove advantageous in case of loss or theft, for payment could then be made only by forging the owner's name. The unregistered bond is more readily transferred, since it is payable to bearer and is therefore negotiable merely by delivery. Interest on the registered bond is paid directly to the party specified, while in the case of the unregistered bond this disbursement is given to any holder of the coupons attached to the instrument, and so it is usually called a coupon bond. Bonds may be registered as to principal and also as to interest. The coupon itself may be regarded as a promissory note in which the corporation agrees to pay the holder the interest.

3. Short-term Note.

The purpose in issuing a bond is to raise capital for undertaking more or less permanent improvements, and this accounts for the length of its maturity. The corporation may secure funds to cover a briefer period of time by means of the short-term note. This instrument is similar in nature to a bond, for both documents are promises to repay borrowed money. They differ in the matter of interest, principal, maturity, and general form. The short-term note is generally used by a corporation in a period when stringency renders the money market unfavorable, especially for long-term borrowers. The note thus bears a higher rate of interest, and because of this expense the makers seek to limit as much as possible both the amount and the

maturity of such borrowings. The duration of a short-term note seldom exceeds five, and usually averages two, years. It is also quite informal in content and no seal is required.

Bonds and stocks differ in several important respects. The bond expires after a definite period of time, while the stock has in fact no fixed date of maturity. Furthermore, the interest on the bond must be paid absolutely, while dividends on the stock are distributed only if justified by the earnings of the corporation. In the event of default on either principal or interest, bondholders may press their claims as creditors, while stockholders possess no such rights since they are part owners in the enterprise.

CHAPTER IV

THE FIELD OF BANKING

I. Principles of Bank Classification.

The thirty thousand banking institutions in the United States may be classified according to the following principles: (1) legal status, (2) economic function, (3) operating method, (4) customers' control, (5) territorial activity. As it has not been mandatory until recent years for bankers to secure the authority of law before beginning to operate their business, there are still many private or unincorporated banks. However, the vast majority are chartered under the laws of the various states or the national government. So in a general way banks may be grouped as either private or public. These terms, of course, refer only to the subject of incorporation and imply no difference in ownership, for American banks are universally operated by private capital. One exception is the Bank of North Dakota, which is operated by state funds and is therefore a publicly owned enterprise.

Public or incorporated banks exist by virtue of charters either passed as special acts of a legislative body or issued under the general incorporation laws of the government. In the United States the granting of special charters soon gave way to a system which permitted any group of individuals to enter the field of banking if they complied with the regulations of the general incorporation law. Such a statute was enacted

first in New York and was later copied by the Western states. Finally, in 1863 Congress provided for the federal chartering of banks under a general law known as the National Bank Act.

A second classification of banks rests upon the economic function which they perform. One class of financial institution gathers the savings of the community and provides business enterprises with permanent capital represented by stocks, bonds, or notes. A considerable part of these funds will be applied to erecting factories, extending railways, and developing other permanent aids to production. Investment banks supply industry with these long-term funds, while on the other hand commercial banks to a large extent furnish short-term credit, enabling the business man to purchase materials, pay his employees, and meet his current expenses.

A third basis for classifying banking institutions rests upon their method of operation. One group receives deposits and through them obtains the funds which it employs in making loans. Other banking institutions accept no deposits, but finance business undertakings by acting solely in the capacity of middlemen between borrowers and lenders.

A fourth basis of classification is based upon the control of the bank. It is usually operated precisely as an ordinary business enterprise, in which customers have no control over management. While the depositor may at times be a stockholder or even a director, he usually exercises no influence over the policies of the bank. Certain other institutions, however, are co-operative in nature and are designed to extend loans mainly to their own members.

Banks may also be grouped as domestic or foreign, depending upon the territory in which they conduct their operations.

These five methods of classification are by no means of equal significance. The legal structure of a bank exerts small influence on the nature of its business, for it matters little whether or not it is incorporated. As only a few banks are co-operative in nature, the question of customers' control requires only brief attention. Also there is no essential difference in the nature of a bank whether engaged in financing foreign or domestic business. Thus consideration need be given only to the economic function and the operative method of banking institutions. They will all be briefly viewed in this chapter, while intensive study will later be given to the more important types, such as commercial, investment and savings banks and trust companies.

II. Private Banks.

As noted above, banking may be conducted by either chartered institutions or unincorporated associations. The latter include the many individuals and partnerships conducting private banks. In the country, the individual private banker is often a business man who has successfully managed a local enterprise. Having thus attained the confidence of the community, he is in a position to receive deposits of funds and make loans to his neighbors.

Private bankers are also found in cities with large colonies of immigrants. These persons are continually remitting funds to their native countries, and occasionally sending steamship tickets to bring their friends and relatives to the new land. The low rates quoted on European currencies have tempted many to buy foreign exchange solely for the purpose of speculation. Such transactions are handled by private

individuals who frequently operate a general banking business.

Another type of private bank is the partnership, which includes a powerful group of financiers engaged in both commercial and investment banking on an international scale. One well-known firm with headquarters in New York has through connections abroad extended large credits for the financing of exports and imports for over a century. Another is an unincorporated association of a large number of partners interested mainly in the field of investment banking. During the war it acted as fiscal agent for foreign governments and floated loans of unprecedented amount. This firm also organizes syndicates to finance industrial enterprises, as in the case of the Great Northern–Northern Pacific railroads, which in 1921 placed on the market securities amounting to $230,000,000.

III. Commercial Banking and Financing Institutions.

The commercial or business bank performs the operations of receiving deposits and making loans. It uses its own capital and its receipts of money as a basis for the making of loans to several times the amount of these deposits. A bank may extend a loan to a customer by writing the amount in his deposit account against which he can then draw checks. The borrower may also receive credit from the bank in the form of its notes, which circulate throughout the community as media of exchange.

Institutions which perform these operations may be grouped according to whether they are chartered under state or national law. This legal distinction no

longer affects materially the scope of business conducted by either type. Until recently, while state banks were generally permitted to lend money on farm land and other real estate, national banks were prohibited from granting such loans. On the other hand, national banks have been allowed to issue their own notes for circulation, but similar issues by state institutions were taxed out of existence by a federal levy of 10 per cent. The Federal Reserve Act has eliminated these differences between commercial banks by conferring upon national banks the right to lend on real estate, but at the same time providing for the gradual extinction of their circulating notes.

Commercial banks may also be classified according to whether their business is essentially domestic or foreign. Most banks are engaged in financing local transactions, such as extending credit to the farmer for raising his crops or to the manufacturer for operating his mill.

In addition to engaging in domestic financing, large commercial banks, particularly in the seaboard cities, also operate foreign departments for extending credit to exporters and importers. In fact, some banks do not enter into the financing of domestic transactions at all, but are engaged exclusively in facilitating foreign trade. These institutions perform the same services as the domestic bank, but differ only in the geographic area of their operations. While these institutions confine their activities to a definite territory, nevertheless in this field they perform all the operations of banking. They receive deposits, make loans, and at times issue notes for circulation.

Although city banks carry the accounts of firms representing many lines of business, there is often a tendency to specialize the extending of credit to certain industries. This is due in a large measure to the usual

concentration of firms engaged in the same business in one locality, and obviously banks in this territory become closely identified with these enterprises. In the financing of a few industries, such as textiles or automobiles, specialization has advanced to a stage where an institution will grant credit only to firms engaged in this one line of business.

A further step toward specialization has been the development of finance corporations, or discount companies, which do not receive deposits, but instead act as intermediaries between lenders and borrowers. This type of banking institution discounts or buys the accounts, trade acceptances and notes receivable of borrowing firms, and on the basis of these claims sells its own obligations to individuals and banks, who thus become the real lenders.

Another type of specialized intermediary institution is the commercial-paper house, which also receives no deposits, but extends credit to borrowers through buying their obligations. These are sold directly to purchasers, and in this respect the commercial-paper house differs from the discount company which markets its own obligations. In no case does the dealer indorse the paper, and so he cannot be held liable by the purchaser if the instrument is dishonored at maturity. The commercial-paper house also differs from the discount company in that it is not incorporated, but is organized as a partnership or headed by a single individual.

IV. Investment Banks.

The investment banker, like the commercial-paper dealer, is essentially a middleman engaging with governments and corporations who seek permanent capital to make public improvements or to develop private

enterprises, and advising individuals and institutions who seek to invest funds for a long period of time. The investment houses are usually private institutions conducted by a small group of partners. Only a few are incorporated and are therefore subject to practically no public regulation. Investment houses are of certain recognized general kinds. The wholesale banks purchase large issues of industrial or governmental securities or they guarantee the raising of the required sum. These firms themselves do not sell to investors, but instead leave this function to retailers. The larger houses distribute stocks and bonds directly to investors and also indirectly through small retailers or bond houses.

In the field of investment finance there are certain institutions which parallel the discount companies which buy claims and with these as collateral issue their own obligations. These concerns are known as "investment trusts." In England and the Continent they have been organized for years for the purpose of absorbing foreign securities, and on these as a basis selling their own debentures. In the United States this plan has been applied largely to the raising of loans on city and country property. A mortgage of several millions of dollars on a large hotel or office building is distributed by the investment house in small units among a large number of investors. The holders of these bonds become creditors of the issuing bank, but in no sense are they the mortgagees of the property which is serving as collateral.

Mortgagees may retain title of property pledged and at the same time have the principal and interest of the mortgage guaranteed by a form of investment bank which specializes in this service. This company becomes practically the indorser of the obligation, for it assumes all liabilities even to the extent of fully reim-

bursing the mortgagee if the property at a foreclosure sale does not yield an amount sufficient to cover his claims.

V. Trust Companies.

Trust companies may be regarded as investment institutions, for they also contribute permanent capital to industrial and railroad corporations. These investment activities of trust companies are more or less ancillary to their regular fiduciary business, for they are called upon to invest large sums of money in administering various kinds of trusts. A trust company may act in behalf of another corporation or of a person, and so it handles either a corporate or an individual trust. In executing corporate trusts, the company may act in such capacities as manager or member of an underwriting syndicate, fiscal agent, trustee under corporate mortgage, assignee, and receiver. For the individual, the trust company may serve as executor under a will or administrator under court order, guardian, and general trustee. These classes of trusts are described in full in Chapter XV.

VI. Savings Banks.

The savings bank is also a form of investment institution. It receives deposits mainly from persons of moderate means who are desirous of selecting a secure depository for their funds, and, since they seldom make withdrawals as compared with commercial depositors, the bank is able to place these savings in long-term investments such as real-estate mortgages and high-grade securities. Savings banks thus perform a distinct service by indirectly investing the surplus funds of persons who are unable, because of inexperi-

ence, directly to place their money in investments which have a satisfactory yield and procure at the same time maximum safety.

A savings bank may be organized either as a stock or nonstock institution. Funds may be supplied from the issue of capital stock, and so the earnings are distributed in the form of dividends to shareholders. They elect a board of directors, who control the operation of the bank. While this stock type of organization is found throughout the Western and Southern states, the nonstock, or mutual, savings bank prevails in Northeastern states. This institution has no capital stock, for its resources are contributed not by stockholders, but emanate from the organizers and later from depositors. In place of a board of directors there is a body of trustees who determine the policies of the mutual savings bank in the interest solely of the depositors.

VII. Co-operative Banking Institutions.

Similar to the mutual savings bank is the building-and-loan association. They both receive earnings from a number of small depositors and lend these funds on security consisting usually of real estate. These associations are owned by the contributors of the funds and these persons receive the net profits derived from the granting of the loans. However, there is a difference in operation. The savings bank obtained its resources from persons making deposits, while the loan association secures its funds from individuals buying shares in the organization. Furthermore, the savings bank uniformly lends its money to borrowers who have no connection with the institution, whereas the loan association generally grants accommodation only to its members. Savings banks distribute their funds over a wide range of investments, but loan associations

ordinarily confine their activities to assist persons who are buying real estate or building homes.

Another form of co-operative banking is the credit union. Its development has not been extensive in the United States, although the building-and-loan association has experienced a rapid growth. Both aim to encourage thrift among their members by receiving their savings and lending them to borrowers at a reasonable rate of interest. The credit union differs from the loan association in that it supplies credit for a short period of time, and makes these grants exclusively to its own members. Thus each borrower is personally known to his associates in the union and so the loan is based on his character rather than on collateral such as real estate.

The Morris Plan Bank also makes loans to small borrowers who have no bank accounts and who find difficulty in securing credit. These loans are made on a promissory note of the borrower, whose credit is further guaranteed by at least two indorsers, or "co-makers." The Morris Plan Bank is not really a co-operative association, for while it seeks to sell its shares to prospective borrowers, it is a regular business enterprise whose capital is derived largely from stockholders not necessarily recipients of loans.

VIII. Tendencies in American Banking.

From this survey, it must not be concluded that the banking structure of the United States is composed of a number of groups of specialized institutions, for there has been comparatively little tendency toward specialization in the field of banking proper. A large commercial bank has frequently absorbed a trust company, or, on the contrary, a progressive trust company, desirous of entering into commercial banking, has at

times taken over a long-established national bank. These mergers have resulted in powerful banking institutions which have further extended their activities to include other fields of finance, by opening departments for receiving time deposits and also by operating securities departments for handling investments. A large modern bank is therefore able to offer its customers practically every possible financial service in much the same manner that a department store places on sale goods of every description.

Part II

COMMERCIAL BANKING

CHAPTER V

BANK ORGANIZATION AND ADMINISTRATION

I. The Bank as a Type of Business Organization.

Having surveyed the entire field of banking, consideration will be confined to the various aspects of the commercial bank. Its organization will first be analyzed with particular reference to differences and similarities to the ordinary business enterprise. The three types of business organization—the individual, partnership, and corporation—are all found in the field of banking. Any person or group of persons may engage in banking in the same manner as in an ordinary private business such as retailing or manufacturing. Although the business of banking, by reasons of its semipublic nature, is placed under certain governmental regulations, it is not confined by law to the corporate form of organization. But as most banks are chartered institutions, it is necessary to study them particularly from the corporate point of view.

Chartered banks share in all the advantages derived from being organized as corporations. The existence of the bank is practically continuous, for it receives a charter which generally allows it a life of twenty years, and this term is usually extended by mere application to the proper authorities. The feature of the limited liability of owners is especially attractive in banking where the element of risk is heavy. Also the issue of shares renders possible the raising of capital in large amounts.

On the other hand, corporate organization carries with it certain disadvantages which are especially onerous in the case of banks. Heavy taxes must be paid to the federal, state, and local governments. In addition, both national and state supervisory officials several times within the year demand detailed reports concerning the financial condition of the banks, and they must also be prepared for government examiners who may visit them unexpectedly and conduct searching investigations of all operations.

II. The Incorporation of a Bank.

Before the Civil War, when banks were first organized as corporations, it was generally necessary to obtain a special act of incorporation from the legislature. In time, such special charters gave way before the plan of issuing grants under a general incorporation law which viewed the bank in the light of an ordinary business enterprise. Later a distinction was drawn between banks and other corporations, and a separate banking law was enacted for granting general charters to financial institutions. Since the National Bank Act has served as a model for similar statutes in the various states, only the steps required for federal incorporation will be described.

Banks are organized for a wide variety of reasons. A new community, undergoing rapid industrial expansion, may urgently need banking facilities larger than the existing institutions are able to provide. If the older banks are already discounting all the commercial paper which their resources permit, if their loans are approaching the limit fixed by law, and if this strain is not met by increasing capital stock, then it is time for the public to insist upon a new organization. However, not all banks are founded because of

legitimate economic needs. It may happen that a minority group of directors or stockholders becomes dissatisfied with the lending policy of the established bank and seeks better results in a new enterprise. Fortunately for the business of banking, it has not been seriously invaded by the professional promoter who has launched so many unsuccessful ventures in other fields of corporate organization. In a large measure this is due to the careful regulations with which the law has safeguarded the starting of a new bank.

In organizing a national bank a prescribed routine must be closely followed. First, an application is made by five or more natural persons to the Comptroller of the Currency at Washington. This application must be indorsed by three public officials of the district where the prospective bank is to be situated. The object of this regulation is to give some assurance that the new bank is the result of an actual local demand, and not the product of external influences. After the application has been received, an examiner is sent to survey the economic and financial condition of the community. He studies local industries and their prospects for development to determine whether their future needs fully justify the establishing of another bank. The examiner analyzes the operation of the older institutions to judge whether their interest rates are reasonable or general services satisfactory. He also considers whether the organizers possess general character and financial experience necessary to inspire the confidence of prospective stockholders and depositors. If the findings of the examiner are favorable and if the Comptroller has approved the application, the next step in forming the new bank is to circulate a subscription list. It is signed by prospective shareholders, who are required to declare the amount of their subscriptions. The contract serves as an indica-

tion of the support which the community is likely to give to the new bank, and also acts as an engagement which binds subscribers to their pledges. The subscription list is no longer considered as a necessary instrument in many states in the forming of industrial corporations, but it is still required by law in the incorporating of banks. Five or more persons sign the "articles of association" and the "organization certificate" containing such details as name of the bank, location, amount of stock, and number of directors. The certificate of organization may be regarded virtually as a charter, since it signifies that the incorporators have complied with the national law and that they are now authorized to open the doors of the new bank for business.

III. Capital Stock.

It is evident that organizing a national bank in some respects differs from starting an ordinary business corporation. The bank's capital stock has particular characteristics not ordinarily possessed by other corporations. The business incorporation laws of the states usually leave the amount of stock authorized in the charter to the judgment of the organizers. In banking it is highly desirable to determine a minimum limit, so that new banks shall begin with funds adequate to meet initial expenses. This minimum could be made uniform for all banks, but it is a better plan to adjust the amount according to the volume of business which may be anticipated. The sum cannot be predicted with any degree of accuracy, and therefore the minimum capital required by law is graded according to the population of the city in which the bank has its site. On the theory that there is a relation between the volume of business and the size of the locality the re-

quirements under the National Bank Act are as follows:

Minimum Capital	Population Less Than
$ 25,000	3,000
50,000	6,000
100,000	50,000
Over 200,000	Over 50,000

These regulations were enacted in 1900 and have remained unchanged, although the general price level has practically doubled within this period. The above requirements, therefore, are inadequate to meet the existing needs of business, but Congress has been reluctant to advance them. The active demand for credit since 1914 has compelled banks to increase their capital far above the legal requirements, and, in fact, the problem in banking is one of undercapitalization.

In the case of a business corporation, the subscribed capital may be far in excess of the amount actually paid in, for the law usually gives the directors full discretion in demanding payment from the subscribers. No such choice is allowed to the directors of national banks, for at least 50 per cent of the stock must be actually paid in before beginning operation, while the remainder may be contributed within five months in installments of 10 per cent each. Furthermore, payment must be effected in cash, for promissory notes or securities are not acceptable. These regulations governing the authorized, subscribed, and paid-in capital stock of banks have eliminated the evils of stock watering so common in the general field of business corporations.

Another feature peculiar to bank stock is its uniform quality. Banks issue only common stock, while the ordinary business corporations, in addition, may offer to investors preferred stock and also bonds of various kinds. No such priority is recognized among bank

stockholders, who are all placed on an equal footing. There is a growing tendency in modern corporate practice to place on the market stocks with no fixed par value, but this movement has not affected the business of banking, for in this field it is still customary to issue stock at a par value of one hundred dollars. As a result of all these safeguards, bank stock proves generally attractive to investors. The earnings of banks have been large and market quotations for the stock of leading banks have risen far above the par value.

IV. Surplus.

Earnings are not entirely distributed to the stockholders of the bank, for a conservative management follows the policy of setting aside a portion to form a surplus in order to meet unexpected losses. Surplus is not always accumulated from earnings, but it frequently is paid in at the time of organizing the bank. In fact, the National Bank Act seeks to encourage the establishment of an initial surplus by stipulating that dividends cannot be declared until 10 per cent of the net profits of the preceding half year have been carried to the surplus until this account shall amount to 20 per cent of the capital. It is, therefore, customary to place the stock of a new bank on the market at a quotation of 120, and this premium from the start creates the necessary surplus. As an illustration: the organizers of a national bank are authorized to issue 1,000 shares, and if these are sold at a quotation of 120, the bank would start with $100,000 as capital and $20,000 as surplus. Under this plan the bank possesses the required surplus immediately, and the directors are soon able to declare dividends if profits warrant this step. From the standpoint of the stock-

holders another advantage is derived in enlarging surplus rather than capital, since the former involves no liability to the owners of bank's stock. It is, therefore, quite common for banks to accumulate a surplus far in excess of their capital.

V. Stockholders.

Although stockholders are the nominal proprietors of the bank, they hold a position relatively unimportant, for they take no active part in management. Stockholders have access to a few records of the bank. They also have the right to assemble for the purpose of electing new directors and of approving general policies. Originally it was the inherent right of stockholders to enact the by-laws of the bank, but in the evolution of corporate organization this power has been delegated to the directors. Stockholders are naturally entitled to participate in profits, which they receive in the form of dividends. At the same time they must also bear losses if these are serious enough to force the bank into the hands of a receiver. In the case of bank stockholders this situation may involve heavy loss to the stockholders, for they are under double liability. The receiver, acting in the interest of creditors of a bank which has failed, may assess all holders of the stock for a sum equaling its par value.

VI. Directors.

1. *Qualifications.*

The stockholders of a bank choose a board of directors who formulate the policies of the institution. They are elected for a term of one year by the shareholders at their annual meeting, which is usually held in January. The statutory qualifications of a director are the fol-

lowing: (a) citizenship, (b) residence, (c) holdings of bank stock. Every director must be a citizen of the United States, and during his tenure of office a resident of the state or territory where the bank is located. Three-fourths of the board of directors shall have resided in the state or territory at least one year before their election. By an amendment passed in 1921 this residence qualification was broadened to include also the area within fifty miles of the site of the bank regardless of state border lines. Thirdly, every director must hold not less than five shares, if the bank has a capital of less than $25,000, and if in excess of this amount, he must possess at least ten shares of the capital stock. This is merely a nominal qualification, for a director frequently represents interests which control a large block of the bank's stock.

2. Duties.

The list of the directors may serve as a valuable factor in increasing the bank's business, for the nomination of citizens of character and ability will inspire the confidence of the community and will thus induce depositors to place their funds with the bank. The leading industries of the community should have representation on the board of directors, not only to attract their business, but also to keep the bank in touch with the condition of local economic interests. This information is of utmost importance to the board, for its main function is to express its approval or disapproval of all loans proposed by the officers of the bank. The directors are the sentinels who must guard against extending loans to unworthy borrowers. Directors also have complete control over the personnel of the bank and have final jurisdiction over appointments and dismissals of members of the staff.

Another executive function of the board, is periodi-

cally to examine the financial condition of the bank. This is more than a mere formality, for it is customary to retain outside auditors to scrutinize records and ledgers and to submit a detailed report of their findings.

In their legislative capacity the directors usually enact the by-laws of the bank. These regulations aim to secure uniformity in operations. The by-laws define the powers which officers may exercise, the rules which directors must observe at their meetings, and the procedure which shareholders must follow in their annual assemblies. Also, dividends can be declared only by action of the directors. In general, they may buy and sell property, enter into contracts, and avail themselves of any power which is specifically conferred upon the bank under its charter.

The organization of the board depends upon its volume of business. In the case of a small bank the board may consist of the legal minimum of five members, and they may meet as a single body at infrequent intervals. On the other hand, a metropolitan bank is governed by a board of about twenty-five members, who in turn are divided into small committees, each specializing in one or more of the duties described above. Groups of directors thus serve on personnel, auditing, and discount committees. The discount committee, which passes on all applications for loans, is the most active, and in a large bank may hold daily meetings.

For these services directors receive no salary, but it is customary to allow them a ten-dollar gold piece as an honorarium. Directors who seek a larger return by influencing the action of the board in granting loans to their own business interests, or in withholding advances to competing firms, commit an abuse of power which is not specifically prohibited by any section of the National Bank Act, but is nevertheless restrained by

the action of the Comptroller of the Currency in requiring banks to state in their reports the full amount of loans granted to their directors.

3. Liabilities.

Although acting without large compensation, a bank director assumes individual liabilities which may prove costly under conditions of adversity. As in the case of any other corporation, the director of a bank must exercise an ordinary degree of care in the general administration of the institution. Naturally, the director of a corporate organization cannot be expected to undertake personally the details of actual management, and these duties must necessarily be delegated to officers and other agents. However, directors of a bank have been held individually liable for such acts as neglecting affairs, assenting to excessive loans, and publishing false reports. One director absented himself from board meetings for five years, during which time the business was grossly mishandled by the officers. The court, therefore, adjudged the director fully responsible, since he had not exercised reasonable care and diligence. A similar view was taken in the case of a bank in which it was the practice to grant officers loans unwarranted in amount. The Comptroller's office brought these facts to the attention of the board of directors, but no action was taken, with the result that the bank finally became insolvent and the directors were judged liable for the irregularities. Damages have also been collected by a person who had purchased bank stock on the strength of a statement showing the financial condition of the institution. In this case, the director suffered loss for lending his name to a report containing false items. In general, both state and national laws are quite stringent in fixing the liabilities of bank directors, and the courts in recent years have

placed a broad construction upon these obligations. Undoubtedly this attitude has led directors of banks to exercise a supervision more stringent than that applied in other corporations, and so bank failures during the past decade have been materially lessened.

4. Interlocking Directorates.

The tendency toward integration which has influenced the evolution of all lines of "big business" has also affected the development of financial corporations. One method of eliminating competition and securing community of interest has been to appoint the same directors on the boards of the banks over which control is sought. This practice became quite extensive, and finally, in 1914, Congress passed, as part of the general anti-trust legislation of the time, the Clayton Act, which forbade these "interlocking directorates" for certain classes of banks. This statute prohibited any person from acting at the same time as director, officer, or employee in two or more banks or trust companies operating under the laws of the United States and having deposits, capital, surplus, and undivided profits in excess of $5,000,000. The same restriction applied to banks or trust companies located within the same city if it possessed a population over 200,000. In order to observe the provisions of the Act, many persons who held several directorates in large banks withdrew from these offices.

The original Clayton Act caused embarrassment especially to metropolitan banks, and in 1916 its terms were rendered less exacting by the Kern Amendment. The statute thus revised permitted individuals simultaneously to serve two or more banks which were members of the Federal Reserve system provided these institutions were not in "substantial competition." The duty of interpreting the Act was assigned to the

Federal Reserve Board. If a person now desires to hold directorships in two or more large banking institutions, he first presents his application to the Federal Reserve Board, which determines whether or not competition is being restrained. In rendering these decisions the board has followed a liberal policy. Comparatively few applications have been rejected, but many changes have occurred through voluntary action of directors.

VII. The Bank Officers.

1. *President.*

The function of the board of directors is essentially one of general supervision of the bank's affairs, for actual management is delegated to an executive staff. The president is the active head of the organization and serves as the connecting link between directors and employees of the bank. There is always a close relationship between the directors and the president. Under the National Bank Act he must be a member of the board and may also preside at its meetings. It is the tendency among larger banks to relieve the president of the duties of chairmanship and to designate another director for the office. This appointee may be a president emeritus who is too advanced in years for active service, but who is well qualified by experience to give mature counsel. In a few large banks the chairman of the board is an active operating officer and actually has the powers of the president, who, in such banks, becomes a subordinate officer. Practice seems to favor the plan of vesting the duties of both president of the bank and chairman of the board in one individual.

The board frequently selects as president from its own number one who has been successful in operating a local enterprise. He has thus acquired considerable

business experience which can be applied to advantage in directing the policies of the bank. However, his understanding of the technical phases of banking is often confined to the limited knowledge which he has gathered from attendance at meetings of the board of directors. As such training is insufficient for a full mastery of the technical details of operation, it has become the policy of some institutions to elevate to the presidency an officer who has risen from the lower ranks. In selecting a president the larger banks generally prefer the trained banker to the successful business man.

The duties of the president, as stated in the provisions of the National Bank law, are very limited, and in fact there is little legal difference between his power and that of any other director. The president is regarded as the representative of the bank in the event of litigation, and, therefore, is given the right to retain counsel, to defend the bank, or bring suit in its name. Although this is the only inherent power granted by law, the president in actual practice assumes a number of important duties. While these functions thus remain undefined by law, their extent is determined rather by the custom of the bank or the will of the president himself. As he is a member of the board of directors, he is in a position to influence the shaping of the bank's general policy. In fact, he is the intermediary who communicates the wishes of the board to the members of the staff. Subject to the final approval of the directors, the president passes upon loans made to borrowers, and also invests the surplus funds of the bank. The president must act as the representative of the bank in its dealings with the outside public, and in this capacity he is able to attract profitable business and new accounts to the bank.

2. Vice-President.

At times the vice-president is also selected from the board of directors. This plan results in a close connection between the vice-president and the board. A vice-president is occasionally appointed because of his affiliation with a family controlling prominent local business interests. Under such circumstances he is expected to draw these accounts to the bank, but otherwise he may be called upon to perform little actual service. However, many vice-presidents are experienced executives selected from among the junior officers of the bank or from outside institutions. The number of vice-presidents will vary according to the size of the organization—from one in the case of a small institution to half a dozen or more in a large bank which has grown through expanding its business or through consolidating several competitors.

In a small bank the vice-president may act as the representative of the president, or as assistant in carrying out the duties of granting loans, securing new accounts, and directing the general policy of the bank. In a large bank having several vice-presidents it is possible to distribute these duties so that the best results may be attained through either territorial or departmental specialization. A vice-president may have acquired an intimate knowledge of the economic and financial conditions in a certain section of the country through previous residence or business experience, and so he is given jurisdiction over the transactions in this territory. The principle of specialization is also applied in assigning to a vice-president the supervision of a single department such as the foreign, bond, or trust division in which he has shown particular aptitude.

3. Cashier.

The position of the cashier in a bank really involves

all the duties usually attaching to the office of secretary, chief clerk and treasurer combined. While the position of secretary can be found on the staff of any ordinary corporation, this office rarely appears in any banking institution other than a trust company. The cashier of the bank acts as secretary to the board of directors and at times is a member of this body. In this capacity he prepares reports and statements for the consideration of the board and compiles the minutes of meetings. As chief clerk he has general control over internal operation and responsibility for carrying out the policies dictated by the board, the president, and the vice-presidents. He therefore has jurisdiction over the clerical staff, routine office correspondence, files and records of the bank. As his name implies, the cashier has control over the funds of the bank and so is empowered to sign checks for paying debts assumed in the course of daily business. In fact, the cashier in every respect is treasurer, for he is in charge of the bank's safety vaults. As it is thus essential for the cashier to know the intricacies of bank routine, he is always an internal appointee with wide experience in banking technic.

The president, vice-president, and cashier of the bank are the only officers recognized by the National Bank Act, and they alone may serve as legal agents with authority to bind the bank. These general executives may be aided in their duties by various other officers. On the staff of the large banks are found assistant vice-presidents and assistant cashiers and department managers who may serve as personal aides to their respective superior officers. In addition, there are a number of tellers and clerks connected with the various departments of the bank. Their duties are determined by the workings of their separate departments described in detail in the following chapter.

CHAPTER VI

BANK OPERATION

I. Function of a Commercial Bank.

The previous chapter has traced the organization of a commercial bank and has touched upon its administration by explaining the duties of the officers Continuing the general survey of the commercial bank, the next step is to analyze the actual working of its various departments. These operations could be examined to advantage from the viewpoint of the banker himself, but it is the purpose of this book to present the subject rather from the position of the depositor. Therefore, the following study of bank operation will be external rather than internal in treatment, and will present only those features of technical practice which are essential to an understanding of the principles underlying commercial banking.

As we have already seen, the central function of a commercial bank is to substitute its own credit, which has general acceptance in the business community, for the individual's credit, which has only limited acceptability. How this single function is exercised in actual practice may readily be understood by viewing the relation between a bank and a depositor. Let us assume that A of New York City has sold a bill of goods worth $100 to B of Boston. The latter may settle with A by giving him cash, a check, or a promissory note. If payment be made in cash, A generally uses this money to build up his account at his bank,

and so he brings it to the receiving teller, who adds the amount of the deposit to his credit with the bank. A now possesses $100 of bank credit which he may withdraw at any time. If he wishes to transfer this sum to one of his creditors, he will draw a check in favor of the latter, who may present the instrument for payment directly to the paying teller of the drawee bank.

The transaction thus described has involved only the receiving and the paying of a deposit of cash. But modern business is not generally conducted on a mere cash basis, and its financial aspects cannot be understood by so simple an illustration. As mentioned above, B may also reimburse A by means of a check drawn in this instance on a bank located in Boston. A now holds a claim on Boston funds which naturally he prefers to have available for his use in New York. One way to secure this purpose would be to sell his claim of $100 to some one who owes a similar amount to a creditor in Boston. However, an easier method is merely to deposit the check with his New York bank, which is continually engaged in offsetting such claims with institutions in other financial centers. Thus, without any further trouble to A, his bank accepts the deposit of the check, credits his account, and then allows him to draw against the sum. This service by which banks secure payment of claims on one another is the operation of exchange.

Another aspect of banking practice is illustrated by the third method of payment, by which B gives his creditor a note promising to pay $100 within a certain number of days after date. A thus holds a claim on future funds, but this will be of little value if he must meet immediate obligations of his own creditors. A thereupon takes the promissory note to his bank, which first tests the financial responsibility of both

parties. If satisfied, the bank credits the account of A and thus permits him to make withdrawals for the payment of his debts. The bank has thus substituted its own credit for that of B, and has given A the right to immediate funds in place of his claim to future funds. This is the process of "discounting."

In this illustration the bank has discounted the note by simply adding the sum to A's deposit account. If the bank is chartered under the national law, it may extend credit to A not only by increasing his deposit, but also by giving him its notes, which circulate throughout the community. This issue power of national banks has declined in importance since the inauguration of the Federal Reserve system, which has provided for the eventual elimination of national-bank notes and the circulation of a new form of currency. Thus the three operations of deposit, exchange, and discount alone have a significance in banking practice. The following sections of this chapter will deal with a bank's departments and subdivisions which carry out these several processes.

II. Receiving Teller.

The work of the receiving teller offers a logical point to begin a study of the bank's operations, for his department is the first to handle the cash and credit instruments presented by customers. In tracing the procedure of this department it is well to start with the preparation of the deposits by the customer. He counts the cash, indorses all checks, drafts, and promissory notes, and lists the various amounts on a deposit slip or ticket which acts as a record of the items offered to the receiving teller. The depositor also presents his pass book in which the receiving teller writes his entries. In addition to serving as a record of deposits,

the pass book is used to settle periodically the account between customer and bank. In the interest of both parties, this settlement or reconcilement is effected quite frequently, for errors, irregularities, and at times forgeries may arise in directing the continuous flow of credit instruments. The pass book as means of reconciling accounts is now giving way to the use of the statement system, whereby the bank sends the customer his returned checks or vouchers, accompanied by a record listing all his deposits and withdrawals. The statement is usually sent every month, but this interval of time may vary from a week to three months, depending upon the activity of the account. Whether the pass book or the statement is used, the principle of reconcilement consists merely of presenting to the customer his credits with the bank as evidenced by deposits, his debits as represented by checks, and the balance or net difference between these two items. The customer's deposit is entered in three records: (1) the slip indicating his deposit, (2) the pass book acknowledging it, (3) the statement summarizing his account. Since the receiving teller must handle deposits with speed, he cannot verify each one as it is presented to him at the window, and so this task is later performed by his assistants. However, it would be impracticable to wait until closing time to compare deposits with the corresponding slips, so they are proved soon after presentation in lots of twenty-five slips or more by what is known as the "batch," or "block," system. After the deposits and the slips have been duly proved, the next step is to allocate the items among the other departments of the bank. Coin and bills are transferred to the paying teller, while checks, notes, and drafts are sorted and then distributed to the various departments which handle the collection of these items. As the city banks have

many out-of-town customers, a large volume of deposits are received through the mail. These items are handled by a mail teller, who receives, proves, and sorts the deposits in about the same manner as the receiving teller. Instead of a slip, the deposits are accompanied by a memorandum known as a letter of advice.

III. Paying Teller.

Through deposits of cash and credit instruments the customer builds up his account with the bank. This bank credit confers upon the depositor the right to draw checks with which to settle his debts and at the same time impose upon the bank the obligation to pay those checks on demand in cash. The responsibility for the outflow of cash is assigned to the paying teller of the bank. In some respects his position is just the reverse of that of the receiving teller. The receiving teller deals only with the bank's customers, for they alone bring deposits to his window. On the other hand, the paying teller comes into contact with the general public, for the depositor of the bank may draw checks in favor of any one person, and such a payee may then order the paying teller to honor the instrument. The work of the receiving teller involves less risk, for errors committed at his window may readily be discovered by assistants later in the day and then corrected. But if the paying teller once overpays the amount of the checks presented to him, this disbursement generally is beyond his control to adjust.

The general function of the paying teller is to effect all disbursements of cash and shipments of currency for the account of the bank. These payments are made for the following purposes: (1) settlement of balances owing to other banks, (2) cashing of checks, (3) preparation of pay rolls, (4) certification of checks.

In all banks the paying teller has sole responsibility for honoring checks drawn by the customers. The payees usually deposit these instruments in their own banks, which present them on the following day for payment through the local clearing house. These clearing-house balances owing to other banks were formerly paid in cash by the paying teller, but they are now settled by simple bookkeeping entries on the ledgers of the Federal Reserve Bank.

A check may be presented by a payee directly at the window of the drawee bank, which is then called upon to cash it if the holder can prove that he is entitled to the money. In making these disbursements the paying teller must note carefully such factors relating to the instrument as the signature, indorsement, date, amount, balance of the account, and stop-payment orders.

The signature of the drawer is verified from a file containing specimens of the handwriting of all the bank's customers. When a check is presented by a person other than the drawer, it is good practice to insist upon indorsement on the reverse side, even if the instrument is filled out to bearer. If a check payable to order is presented by a stranger, it is necessary for him to prove that he is the designated party. This identification may be secured by exhibiting documents such as personal letters and business cards, or by securing an introduction from a customer of the bank.

The paying teller must also observe the date and guard against post- or ante-dated checks. If the drawer has, either through intent or error, postdated the instrument by an advance date, it is the duty of the bank to withhold funds until the specified time arrives. On the other hand, if the holder does not present a check immediately, it becomes antedated, or stale, but payment is usually made by the bank. The teller

carefully examines the amount of the check for any careless discrepancy between the sum written in numbers and in words, and for deliberate raising or alteration. The extent of the customer's credit with the bank is occasionally investigated to find out whether his balance justifies the payment of the checks which he has drawn. At times a customer draws a check to an amount greater than the funds to his credit, and this excess is known as an overdraft, which the bank may refuse to honor. Funds are also withheld from the payee when the drawer issues a stop-payment order. This notice to the bank is written by the customer when he seeks to prevent payment. In summary, the paying teller in cashing checks must guard against forgery, misidentity, postdating, overpayment, alteration, overdraft, and an order to stop payment.

The paying teller's department also prepares the pay roll for those customers of the bank who employ labor on a large scale. These payments are seldom made by checks, but usually in cash. It is necessary to determine in advance the community's demand for the various denominations of bills and the several kinds of small change. As the work of preparing pay rolls involves considerable clerical assistance, it is not unusual for banks to insist that requests be submitted by their customers several days in advance of the date of payment.

Still another duty of the paying teller is the certification of checks. As previously mentioned, the ordinary check is merely an order drawn by the customer against his account with the bank, but the holder of this instrument has no positive guaranty that it will be honored by the bank, for it will refuse payment if the account has been overdrawn or if a stop-payment order has been issued. In certain types of business transactions, such as sales of real estate, the seller naturally has the

right to demand payment before he surrenders his property to the buyer. The transaction may be settled by payment in actual cash, but it is customary to accept reimbursement by a certified check. This is the same in form as an ordinary check, but on its face the paying teller of the bank has signed his name and stamped the expression "certified" or words of similar meaning. This act of the paying teller signifies that the bank has withdrawn the specified sum of money from the account of the drawer of the check and has set it aside for the benefit of the payee. The obligation to pay has thus been transferred from the individual to the bank.

A number of banks combine the work of the receiving and paying tellers in what is known as the unit system. The tellers' windows are arranged in groups of the alphabet such as A–F, G–O, Q–W, and accordingly customers leave deposits and cash checks at the same window. The unit plan saves time for the customer and facilitates the work of the bank, since the tellers handle a smaller number of accounts and thus become more familiar with them.

IV. Classification of Exchange Items.

The receiving teller transfers deposits of cash to the paying teller, who in turn uses the money to meet the claims drawn against the bank. The receiving teller also handles deposits of credit instruments such as checks, promissory notes, and drafts, which the bank presents to the drawee for payment and credits to the account of its customer.

These instruments are classified on a basis determined by noting whether the customer received credit to the account before or after presentation has been made. If the bank gives him immediate credit before presenta-

tion of the instrument, it is described as a "cash" item against which the depositor may draw his checks at any time. On the other hand, if the bank withholds the credit and does not permit the customer to draw against the deposit of the instrument until it has actually been paid, it is then termed a "collection" item. In other words, the cash item allows the depositor immediate credit, while the collection item gives him only deferred credit.

In general, cash items include all instruments which are due or past due, while collection items consist of claims which have not yet matured. For example, a check is a cash item, for it is an order which a bank must pay on demand. A collection item may be illustrated by a draft which has been deposited several days before its maturity.

These instruments may be further classified as city or country, depending upon the place where reimbursement is made. A city item is one which is presented in the same locality as the collecting bank, while a country item is payable anywhere beyond the immediate vicinity. The classes of exchange items handled by a bank may be grouped as follows:

City	cash
	collection
Country	cash
	collection

In order to trace the entire procedure of forwarding these items for ultimate payment, it would be necessary to extend the study beyond a survey of the operations of one bank to a complete analysis of the relations among banks. This subject will be reserved for treatment in Chapter XV, and for the present the dis-

cussion will be confined to those departments within the bank which prepare the items for collection.

V. Collection of City Items.

Most important among the city cash items are checks drawn on other local banks which are also receiving checks from their own customers. Banks in the same community are thus mutually engaged in presenting and at the same time paying claims. As the amount of checks deposited by a customer is credited immediately to his account, the bank seeks payment for these claims from the drawee banks as quickly as possible. In order to present these items to other banks for payment and at the same time to receive in exchange other items on which reimbursement is due, banks have organized themselves into clearing-house associations. A clearing house maintains a meeting place where the clerks of banks which are members of the association exchange reciprocally checks drawn on one another and settle differences in the totals of these claims.

The handling of the city cash items inside the bank involves the preparation of the claims due to the bank and the payment of items owed by the bank. These operations may best be explained by tracing the course of a check from the time it is drawn until it is finally paid. B draws his check on the Y Trust Company in favor of A, who deposits it with the X National Bank of New York. The receiving teller sends the deposit slip to the bookkeeper, who credits the amount to A's account and turns the check over to the department preparing items for the clearing house. The first step is to stamp on all checks an indorsement which reads, "Received payment through the New York Clearing House, prior indorsements guaranteed, De-

cember 1, 1921, The X National Bank of New York." This is an unqualified indorsement by which the bank guarantees the validity of all the previous signatures written on the instrument, and further acknowledges the receipt of payment from the drawee bank. It may happen that a signature proves invalid and payment is eventually refused by the bank on which the check is drawn. As this contingency arises so seldom among the thousands of checks which are daily exchanged, the above indorsement is stamped on all items sent through the clearing house. To the usual indorsement is added the special clearing-house number by which each member is designated rather than by its full name. Next the checks are sorted according to drawee banks, or really according to their respective clearing-house numbers. The check on the Y Trust Company is placed with the others drawn on this bank. When the distribution has been completed, the checks on each bank are then placed in a large envelope to which is attached the exchange slip showing the amount of each check. At a given time in the morning all the envelopes are brought to the clearing house, where the items are exchanged among the banks. The delivery clerk of the X National Bank hands over the proper envelope to the settling clerk of the Y Trust Company, which by this act of acceptance acknowledges the total debt as evidenced by the checks contained in the envelope.

With the checks now in the possession of the drawee bank the next operation is that of verification. This procedure is about the same as that required for the examination of a check brought by the holder to the bank for cashing, for there is really no difference between the presentation of instruments directly by the holder at the window or indirectly through the clearing house. If the check meets all tests satis-

factorily it is then sent to the bookkeeper, who deducts the amount from the account of the drawer of the check. Not all banks in a community are associated with the local clearing house, and checks drawn upon some must be presented by messengers. In the same way, other city cash items, such as bills of exchange and promissory notes, are collected, for these are not necessarily presented to a bank, but may also be payable at the business address of the acceptor or maker. The messengers may be employed by the bank itself, but smaller institutions are able to dispense with the cost of maintaining this force where the local clearing house operates a department for collecting the city items of its members. In New York City, the Federal Reserve Bank also conducts a department which presents local items for payment. Thus New York banks have a choice of three systems for collecting their city items: by their own messengers, and by the staff of either the clearing house or the Federal Reserve Bank.

VI. Collection of Country Items.

Country cash items are credited to the account of the depositors at once, although their collection and ultimate payment may not take place for some time, owing to the fact that the instruments are drawn on banks situated outside of the immediate locality.

These instruments are handled by the transit department. It prepares the country cash items in much the same manner as the clearing-house department handles city cash exchanges—that is, by indorsing, sorting, and listing them. Transit, or country cash, items consist mainly of checks bearing a general indorsement which reads somewhat as follows: "Pay to the order of any Bank, Banker, or Trust Company,

all prior indorsements guaranteed." This expression has the same force as a blank indorsement, for it enables any collecting bank to which the check is forwarded to present it to the drawee and receive payment. By this indorsement a bank is able to transfer claims with far greater speed than by a special indorsement which stipulates the name of every bank acting as collecting agent. The indorsement given above also includes the sending bank's "transit" number, which is composed of two parts, the first designating the local clearing house, the city or the state to which the bank belongs; and second, the clearing-house number of the bank itself. For example, the National City Bank of New York is numbered 1–8, and the Continental and Commercial National Bank of Chicago is designated as 2–3. All banks throughout the country are listed in a numerical system established by the American Bankers' Association, and the out-of-town items are then sorted according to the banks which are to act as collecting agents. These may be classified either on an alphabetic basis according to the name of the collecting bank or on a geographic plan, depending upon the section of the country in which the bank is located.

The final task of the transit department is to list or enter the details concerning the outgoing items on a letter of advice. This transit letter accompanies the outgoing checks and contains such information as the amount of the items inclosed, the name or transit number of the payer, and any special instructions to the collecting bank. Country cash items other than checks are collected in about the same manner. As collection, or noncash, items are not credited to the customer's account until actual payment has been made, this handling involves the additional task of

holding them during the interval between their deposit and collection. This operation must be performed with accuracy, for failure on the part of the bank to present time instruments at their date of maturity may bring loss to the holders in the event of non-payment.

The procedure of recording and filing these items until their maturity is described as "timing." This operation is performed by recording on slips or "tickets" all the facts necessary for negotiations, such as names of all parties, amount, date, and place of payment, together with any special instructions. One ticket is usually attached to the instrument, which is then placed in a file, and the entire transaction is entered or posted in a record book called a "tickler." Both file and tickler are arranged in chronological order so that the items can readily be handled as they mature from day to day. A week before maturity it is customary for the bank to send to the maker of a note or the acceptor of a bill a notice of the approaching maturity of the obligation and of the necessity of meeting it with sufficient funds.

The preparation of these collection items in a small bank devolves upon the note teller. As a rule it is his duty to receive all time items from depositors and to prepare these instruments for collection. In the evolution of bank organization the note teller lost most of his collection duties and has retained only the operation of receiving time items across the window. In addition, his department has been given a variety of other tasks, so that it is regarded as the internal clearing house for handling all miscellaneous items which arise in the daily routine of the bank. The preparation of instruments for collection is performed by several departments which are known by various names, but

they may be described simply as city and country collection departments. In brief, their duties consist of preparing and collecting noncash items. The work of preparation and collection is about the same as in the case of a cash item.

VII. Collection of Coupons.

Discussion so far has been confined to the collection of checks, notes, and drafts, but it should be remembered that customers deposit also coupons which the bank must present for payment. They may be classified the same as any other collection items. If the coupons have already matured they are regarded as cash items, and if still unmatured they are held for collection. Coupons are usually payable in New York City, where most bond issues are financed and where the fiscal agents of large corporations and municipalities are generally located. Coupons are collected in much the same manner as other instruments, but as they are of various sizes and forms, it is customary to place them in special envelopes in which all necessary data are written by the depositor. Coupons cut from securities other than those issued by the federal, state, or municipal governments must be accompanied also by a certificate of ownership required under the federal income-tax laws.

In summary, the purpose of any collection department is to present credit instruments for acceptance or for payment. In this respect there is no essential difference between the work of a bank's city-collection and clearing-house departments, on the one hand, and between the country-collection and transit divisions, on the other hand. The city and country collection departments, in handling noncash items, have an addi-

tional duty in "timing" or holding these items in the interval between their deposit and actual payment.

VIII. The Credit Department.

A depositor's account may be built up by cash, credit instruments, or by loans. The disposition of the cash by the paying teller, and the handling of credit instruments by the collection departments, have already been considered, and it now remains to describe the manner in which the bank grants loans to its customers. This method depends largely upon whether the loans are secured or unsecured. The bank may insist that the borrower pledge some form of property as security for the final payment of his obligations, or it may waive any collateral, and base its loan to the customer entirely on the general ability to repay. Before extending an unsecured loan, a bank must first assure itself of the financial standing and business record of the prospective borrower.

The collecting, analyzing, and filing of such information are performed by the credit department, which is often divided into several divisions, each specializing in a particular operation. From all possible sources the investigation division gathers information regarding borrowers. These findings are assembled and presented in classified credit folders. From these reports the officers determine the line or maximum limit of credit to be extended by the bank to each borrower. The credit folders are continually handled by the investigation division, which adds current information, and by the analysis section, which as a result revises credit lines. It is, therefore, essential to maintain a filing system which can furnish quick and convenient access to the credit records. Another division of the credit department conducts the large volume of corre-

spondence with other banks and business houses with which credit information is interchanged. Another operation of the credit department is to buy notes and acceptances for country correspondent banks seeking to invest surplus funds. A "new business" division is of value in explaining the services of the bank to prospective customers and thus gaining additional accounts. Thus a complete credit department includes investigation, analysis, filing, correspondence, commercial paper, and new-business divisions.

IX. Loan and Discount Department.

The advances which a bank extends to its customers are described either as loans or discounts. The distinction lies in the fact that in the case of the former interest is collected usually at maturity, while in the latter the discount is deducted in advance. As a general rule, loans are collateraled by some form of security, while discounts are usually unsecured.

As there is little uniformity among banks in the organization of their lending departments, it is best to omit such description, and instead to consider the operation of handling a typical demand loan and a time loan. A demand loan is usually accompanied by collateral which may consist of stocks and bonds. The borrower sends these securities to the loan department, where they are carefully examined, and their value is determined by reference to the current market quotations. The bank usually insists upon a margin or difference of about 20 per cent of excess value in the amount of security over the amount of the loan. The purpose of this margin is to safeguard the bank against loss if the market value of the collateral declines.

A margin alone is not sufficient to protect the bank, for the collateral must also be satisfactory in character.

A bank seeks to distribute its risk by demanding mixed collateral consisting of railroad, industrial, and other securities, rather than straight, which is composed only of one class. Conservative stocks are preferred to speculative, which are of an uncertain value. An active security is favored over an inactive one, for the bank can more readily find a buyer if the loan is unpaid. In order to give the bank full title to the securities they must have good delivery—that is, be negotiable in form—and so they are either indorsed in blank by the borrower or he signs a power of attorney. If the collateral is acceptable as to value, margin, quality, and delivery, the bank receives a demand note signed by the borrower and in return grants him the loan.

The procedure of handling a time loan includes the keeping of several additional records. All facts relating to the promissory note are first entered in a discount ledger, which gives the complete history of the debt between borrower and bank. As the note is a time obligation, it is entered in a maturity tickler, which is a diary of all loans filled chronologically according to their due dates. The name of the maker and all the indorsers are recorded in a book known as a liability ledger. The bank thus knows the direct and the contingent liabilities of each borrower and is able to prevent overextension of credit to any individual or firm. On the maturity date the note is presented to the maker, and if payment is made the obligation is canceled.

X. Bookkeeping Department.

In considering the operation of the various departments, reference has been made to the use of ticklers for making temporary entries of daily transactions and also registers for posting more permanent data. These

books may be either bound or loose-leaf in form. The bound book is a more enduring record and less subject to alteration, but it is not so flexible as the loose-leaf folder, which can be expanded by additional carbon slips or tickets. The latter style of accounting, together with the "block proof" for segregating errors, is being extensively adopted by American banks.

Whenever the records of the departments affect the accounts of customers, corresponding entries are made in the individual ledgers, which are divided according to the several classes of depositors, including individuals, banks, and governments. If accounts become numerous, they cannot all be entered in one book and so are further divided into ledgers corresponding to groups of the alphabet, as A–F, G–M, and O–Z. Under the name of each customer, entry is made of all credits to his account from his deposit slips and all debits resulting from his checks.

The records of the departments are also transposed into accounts grouped according to the class of transactions. These accounts summarize the transactions of the bank and constitute the general ledger. Thus every bank has an individual bookkeeper who enters the separate dealings with customers, and a general bookkeeper who assembles the complete records of the bank.

A large bank maintains an auditor's department to verify records and to improve the systems of keeping books. Some departments of the bank are audited only at various times throughout the year, while others handling cash or securities are under continuous scrutiny. In addition to examining the records of the departments, the auditor's staff reconciles differences in the accounts of depositors and prepares the bank's reports to the government and to directors. It is essential to allow complete freedom of action to the

auditor's department, so it is independent of the administrative officers of the bank and is accountable only to the board of directors.

XI. Service Departments.

In addition to the general operation departments for handling deposits, collecting items, and making loans, a bank also conducts a service department consisting of a number of internal and external divisions. The internal, or house, service divisions are auxiliary aids in the efficient administration of the bank, and their number will vary with the size of the bank. A large institution may operate the following divisions: (1) employment (interviews and engages new employees), (2) medical (examines applicants for positions in the bank and gives medical attention to employees), (3) educational (directs courses for special training in banking practice or for general studies in language or current economic events), (4) welfare (conducts recreation activities for employees), (5) library (maintains a circulating and reference library), (6) purchasing (buys supplies and distributes them thoroughout the bank), (7) stenographic (performs addressograph, multigraph, and typing work). For the benefit of customers a bank may conduct external service departments as the following: (1) industrial (gives advice on problems of industrial management such as cost systems, purchasing, production, and sales methods, insurance taxation, and advertising); (2) foreign trade (furnishes economic and statistical information on foreign market conditions, shipping methods, and tariffs); (3) publicity (issues news letters on general financial conditions, pamphlets on special subjects, such as trade opportunities or investments, booklets on facilities offered by the bank, and press notices); (4) trading (executes

orders to buy and sell securities on the market); (5) investments (recommends securities for investment); (6) taxation (computes state and federal taxes on incomes, excess profits, issues of bonds, and transfers of stocks).

CHAPTER VII

THE DEPOSITOR AND HIS BANK

Deposits in the broad meaning are created from: (1) actual cash, (2) credit instruments left by customers, and (3) credit extended by the bank itself. Discussion of the third type will be deferred until the following chapter, while, for the present, attention is directed to the subject of deposits in the sense of actual property or titles to property left with the bank by its customers. Such deposits constitute the very foundation on which a bank is able to erect its structure of credit, for without sufficient deposits of cash or cash items it would be impossible to grant loans to borrowers. From this viewpoint of deposits, the chapter will consider their classification, the relation between bank and depositor, the opening of accounts, inducements offered to secure new customers, and the payment of interest on deposits.

I. Classes of Deposits.

1. Special Deposits.

Deposits from the standpoint of the bank may be classified either as special or general. The legal nature of a special deposit is quite similar to that of cotton or any other commodity stored in a warehouse. The warehouseman is expected to maintain the goods securely and deliver them intact to the owner at his request. In the same way, the banker is intrusted with money, jewelry, or other valuables which must be

kept in a safe place and returned to the depositor whenever he calls for them. He has a right to demand the identical deposit, for he always retains title to it. The bank is in no case the owner of a special deposit, but is only the trustee. In this capacity the bank is expected to exercise reasonable care in safeguarding special deposits and to provide the same protection as for its own property.

2. General Deposits.

A general deposit differs from the special in respect to composition, title, and liability. A general deposit consists largely of cash or cash items which include checks, notes, drafts, or coupons. The actual ownership passes immediately from the depositor to the bank, which does not segregate each deposit, but combines them indiscriminately. In exchange for his deposit, the customer receives a claim in his favor on the books of the bank, which then assumes the position of a debtor. The depositor, as creditor, has the right to demand payment for all or part of the amount left with the bank, which in turn is bound to refund this sum from its general assets.

General deposits are payable either on demand or after a certain period of time. Demand deposits may be withdrawn immediately from the bank by means of checks, while time deposits are payable only after a lapse of a certain number of days. Sums left with savings institutions are really time deposits, for the banks may in an emergency insist upon a notice of thirty to sixty days from depositors who wish a refund of their money. Commercial or business banks handle mainly demand accounts, but receive also time or savings deposits which are payable only after notice, usually of thirty days, has been filed by the customer. As the bank is thus relieved of the necessity of effecting

payment at sight, it is able to invest these funds in slower assets. Besides, a bank which is a member of the Federal Reserve system derives a further advantage from deposits which can be withdrawn only after thirty days' notice, since these require the maintenance of a lower percentage of legal reserve than against demand deposits. The bank is, therefore, solicitous of securing time deposits, and so as an inducement offers its customers a rate of interest higher than that paid on demand deposits.

3. Certificates of Deposit.

General deposits are recorded by entries in a pass book, or evidenced by certificates of deposit. These are instruments in which a bank acknowledges that it has received a sum of money from an individual and promises that the amount will be repaid. The certificate of deposit thus is both a receipt and a promissory note. It may be either negotiable or nonnegotiable in form. If negotiable, it is payable to the bearer or to the order of a designated party, who may transfer it by indorsement, as in the case of any other negotiable instrument. A certificate of deposit payable directly to a specified party is nonnegotiable, and may be assigned to another person only by changing the entries on the books of the bank. The certificate of deposit is payable either on demand or on time. The demand certificate is used as an instrument for guaranteeing the cash payment of obligations or for the transferring of funds from one place to another, and therefore serves the same purpose either as a certified check or a bank draft. Consequently the demand certificate must be negotiable, so that it can readily be transferred by the depositor to his creditor. This party to the transaction is usually prompt in cashing the instrument, as it is generally noninterest bearing. As time certifi-

cates of deposit, on the other hand, are nonnegotiable, they yield a reasonable rate of interest and thus offer profitable means of investing funds which would otherwise remain idle. Time certificates are payable at either a definite or an indefinite date of maturity. One class matures on a set date, while the other is payable thirty days after any date on which the holder has filed notice of his intention to withdraw his deposit. In general, certificates of deposit differ from ordinary deposits in that the amount of the former remains unchanged, for it can neither be increased by deposits of additional sums, nor decreased by withdrawals through checks.

The various forms of deposits may be summarized as follows:

special		
general		
	passbook	demand
		time
	certificate of deposit	demand
		time

II. Classes of Depositors.

Viewed from the standpoint of origin, the deposits of a commercial bank may be grouped as public or private. The United States government maintains accounts with many of the large national banks throughout the country, and likewise states and municipalities deposit their funds in local institutions. Banks are always desirous of receiving these funds, because of the added confidence of the community in depositories of government moneys. These balances in themselves are especially valuable, as they are not generally subject to unexpected withdrawals and so remain relatively constant in amount. Public deposits are created either from receipts of taxes, customs duties, and other revenues, or from loans by banks to governments

through the purchase of bonds, certificates of indebtedness, and other public securities. However, the bulk of bank deposits are derived not from public, but private sources. In the United States the system of making payments through checks has developed so extensively that even persons of moderate means carry bank accounts for handling their domestic disbursements. A banking connection is essential to the small business man as well as to the large firm. The accounts of persons, partnerships, and corporations are all grouped together as individual deposits, to distinguish them from balances left with a bank by other banks. Country banks maintain accounts with correspondents in the large cities in order to draw drafts against these funds and sell them to local customers who wish to remit funds to New York, Chicago, Boston, and other business centers. Because of the inability at times to find suitable placement at home, country banks are forced to send their surpluses to metropolitan correspondents, which may lend them on the open money market and are thus able to allow interest. Banks also maintain reciprocal balances to facilitate the collection of items drawn by their customers on banks or business houses in other cities.

Deposits are also made by trustees acting in such capacities as guardians of minors and executors of estates. The funds are left with the bank until suitable opportunity for investment arises or final settlement of an estate is effected Thus private deposits may be classified as individual, bank, and fiduciary.

Accounts differ somewhat as to the method in which each is opened. A bank will accept a new fiduciary account only if the trustee can show an order from the court appointing him as guardian, executor, receiver, or in some other fiduciary capacity. When a corporation opens a new account it is necessary for the organ-

ization to submit a certified copy of the by-laws or resolutions authorizing the deposit of funds and empowering an officer such as the treasurer to draw checks against these deposits. A bank usually insists upon identification before accepting a new account from an individual. He may bring written references or be personally introduced by another depositor of the bank. These precautions must be taken by the bank, for it assumes a certain amount of risk in giving a checking account to a stranger, who may use it to perpetrate a fraud. If the credentials of the applicant are unsatisfactory, the bank will deny his request for an account. In fact, the bank has a right either to refuse or later to close an account at any time, if such step is warranted by the actions of the depositor. However, a new account is seldom rejected, and the applicant soon finds himself an accepted depositor of the bank after complying with certain formalities. The applicant for an account fills out a card supplying information concerning his business, a statement agreeing to observe the bank's regulations, and a blank giving a specimen of his signature.

III. Methods of Securing New Accounts.

Deposits are essential to the continued existence of any bank, and so there is keen competition to retain old accounts and to secure new ones. Banks formerly regarded the soliciting of deposits as an unprofessional procedure, but this attitude has been abandoned and now aggressive publicity methods are used to secure new business. Banks advertise extensively in newspapers and magazines, and bring themselves to the attention of the public through notices in street cars and even on billboards. A more direct, personal contact may be secured with actual or potential depositors

by mailing them letters, booklets, circulars, and other literature.

A bank is thus able to set forth the various services which it can render to the business man. It aids him in receiving his valuables for safe keeping, in allowing him interest on his surplus funds and in accepting his deposits, against which he may draw checks to pay his obligations. The bank also collects for its customers checks, notes, and acceptances given by their debtors, and secures payment of these instruments. The underlying service which a bank performs for its clients is to grant them loans for the conduct of their business. Herein lies the advantage to a business man of associating himself with a strong bank, for it will naturally give preference to its regular customers in time of a stringent money market, when careful discrimination among applicants for loans is necessary. The maintenance of an account with an established banking institution in itself adds to the credit standing of the client and thus increases his capacity to borrow funds from the community.

In addition to these services which lie strictly in the field of banking, various subsidiary accommodations are offered in order to secure new accounts. Service departments aid customers by furnishing them information on industrial management, foreign trade, investments, and taxation.

IV. Payment of Interest on Deposits.

A wide difference of opinion exists as to payment of interest on balances as a means of attracting deposits. This problem may best be understood by viewing it in connection with the various classes of deposits and depositors of the commercial bank. The question of paying interest does not relate to sums left with the

bank as time accounts or certificates of deposit, for obviously the sole reason for their existence is the fact that they yield interest to the depositors. So the question is confined to whether a bank should pay interest on demand deposits. In normal times governments rarely seek loan accommodations from banks, nor do they make sudden withdrawals of their deposits. Public accounts, therefore, represent deposits of cash which remain relatively inactive, and on such deposits banks are willing to pay interest. The same may be said of fiduciary accounts. There is also little objection to allowing interest on balances of country banks, for these institutions at the same time bring profitable business to their city correspondents.

The problem whether a bank shall pay interest, therefore, refers only to the general individual demand deposits. It is argued that these funds enable banks to operate their business, and therefore depositors are entitled to participate in profits. This contention possessed some force during the period from 1914 to 1920, when banks reaped large earnings and were able to declare high dividends on their stock. However, this prosperity was also shared by other lines of business, and these firms would scarcely be expected to share profits with their customers.

Another argument in favor of paying interest on individual deposits arises by analogy from the fact that such concessions are granted on other kinds of deposits. It must be remembered that there is a special reason for allowing interest on each of these balances as indicated above. Also it is maintained that British and continental banks pay interest on their deposits. However, one must be mindful of the fact that European monetary and banking conditions differ considerably from those which exist in the United States. In most European countries the fundamental medium of

exchange is the circulating bank note, while here the leading instrument for making payment is a check drawn against a bank deposit. An account with an American bank is largely the result of credit extended to the customer by the bank itself, while a deposit in a European bank more frequently results from the leaving of actual cash.

Replying to the arguments favoring the payment of interest on deposits, it is held that in general this step would lead banks to adopt unsafe policies. It is an axiom of business that the amount of profit varies directly with the element of risk. If the necessity of granting interest on deposits forces a bank to strive for higher rates on its loans, obviously the possibility of losses will be increased. Also a bank would be compelled to keep all its funds continually on an active earning basis, and would be thus unable to retain any considerable part as a reserve to meet a sudden demand of its depositors for payment.

V. Rate of Interest on Deposits.

There is no settled practice among American banks regarding the payment of interest on individual demand deposits. Unless the bank and the depositor enter into a special agreement, a demand deposit, by implication, draws no interest. An analysis of this subject in New York State in 1918 disclosed the fact that most commercial banks and trust companies allowed no interest on checking accounts. In many sections of the country where there is keen competition among local banks, they frequently grant such allowances as inducements to win new deposits or to maintain old accounts. Banks often find it necessary to grant interest to depositors who might otherwise keep their balances down to a minimum sufficient only for their

checking needs. Rates as high as 5 per cent have been offered, with the result that institutions have at times been finally forced into insolvency. In order to restrain such unwholesome competition, clearing-house associations have frequently established regulations limiting the maximum rate which member banks are permitted to grant on checking accounts. This rate usually varies from 2 to 2¼ per cent per annum. In fact, the rate should not be constant in amount, but rather should vary with the condition of the money market. As the discount rate rises and falls, a consequent adjustment should be made in the interest allowed on bank deposits.

Where interest is allowed the method of computation depends upon such factors as time, balance, and rate. Interest may be allowed over a period of time covering half or quarter of a year, but it is more customary to reckon on the balance deposited within a month. The balance thus used as a basis for computation may be the lowest amount which has been credited to the customer's account on any one day within the month. This plan is rather inequitable from the viewpoint of the depositor, who may have allowed his account to run low on this particular day because of heavy disbursements. A more satisfactory basis of reckoning is the average daily amount maintained within the month. The more exact method is to calculate interest on the customer's balances separately for each day of the month. As checking accounts are quite active and are continually changing in amount, interest computation is no little task for the bookkeeping department. An added difficulty is encountered because interest cannot be calculated merely on the gross balance credited to the customer on the books of the bank. This amount cannot be regarded as the customer's net cash deposits, for it includes all checks,

drafts, and other items which have been credited but are still uncollected and so are not yet available to the bank for the purpose of making loans. The true interest balance for any day may be expressed in a formula which reads as follows: interest balance = net cash balance at the opening of the day + net cash and cash item deposits credited to the account − checkings and other withdrawals debited during the day.

The rate allowed on a balance is fixed by special agreement between depositor and bank, but it usually depends upon such factors as amount, activity, and composition of balance. A large city bank seldom grants interest on balances which fall below an average daily amount of one thousand dollars, for the overhead cost of a small account is about the same as of a large balance. An account which remains dormant may command an interest allowance, while little can be granted by a bank on an active balance against which checks are continually drawn. A bank must also consider the relative proportion of cash in an account as compared with the amount derived from loans granted to the customer.

CHAPTER VIII

FINANCING THE BUSINESS MAN

I. Problems in Financing Business Enterprises.

As already seen, the relationships between the public and the banker may be merely those of depositor and safe keeper, or of purchaser and furnisher of remittance or exchange, or of user and supplier of currency. In addition to these there is, as already mentioned, another relationship, which is that of lender and borrower. It is this relationship which gives opportunity for the exercise of the real service of the bank, since it gives opportunity for the institution to perform the function known as extension of credit. This function results in the creation of what are called loans and discounts on the part of the bank and these loans and discounts are paralleled or represented on the ledger by "deposit liabilities." The loans and discounts assume any one of a number of different forms, according to the type of "paper" which the bank has bought or discounted.

It must not be supposed, however, that the bank can purchase any kind of paper it chooses or can select the constituent elements in its portfolio according to its own disposition. The bank is surrounded by a community which has specified habits and customs of doing business. These cannot be immediately altered as a result of request or dictation, but if modified must be changed slowly and conservatively. Even

within a given community the individual bank finds it a difficult problem of business competition to select exactly the clientele that it wants. There are many kinds of borrowers and many classes of business in every community. In every trade, occupation, or profession there are many individuals who vary in their solvency and the degree of their reliability, so that the bank must always exercise a great deal of discrimination in the choice of its loans, while it finds itself compelled to transact within certain limits the business that comes to it, since it cannot afford to stand aside merely because of inability to get the particular kind of paper which its officers prefer. There is thus opened in banking a serious question—the question of ascertaining the conditions in business which practically dictate or control the kind of paper that can be offered by the business man in return for the advances which he asks, and the further question of giving sound advice to the borrower with respect to the best methods to be pursued by him in conducting his business, regulating the amount of his loans, and determining the circumstances under which he will trade. The field of study and investigation thus opened is highly varied and the issues raised are multifarious. Nevertheless, it is possible to set forth in a general way the problems which present themselves to the banker and the business man in financing the operations of any particular enterprise.

As already intimated, the fundamental consideration to be borne in mind in determining the advances to be made in any given case is the financial and commercial situation in the trade or occupation where the loans are to be made. Possibly the basic element in this kind of study is the ascertainment of the credit period that is customary in the business. Practically every trade or occupation has what are called "terms of sale" or

standard terms. By this is meant that there is a custom or unwritten law in practically every trade that an ordinary buyer who purchases goods from a seller shall have a given length of time in which to pay for them. In this country at the present time such terms are frequently thirty, sixty, or ninety days. In retail trade the usual practice may be to sell steadily to customers throughout the month, with the understanding that anything bought on or after the first of the month is to be billed to the customer on the first of the following month, with the expectation that remittance will follow within a reasonable time thereafter. In some agricultural regions where customers are tenant farmers who have little available money, it may be the practice to supply goods to such customers steadily throughout the crop-raising season, so that the period of credit there will be from four to six months and in some cases longer.

The question of these terms of sale becomes much more complex in the more highly developed trades, as well as in relations between wholesalers and retailers. In these there is usually a series of alternative terms. For example, if a bill of goods is invoiced at $100 it may be accompanied by a printed statement to the effect that cash within ten days will result in a reduction of 2 per cent, cash within thirty days a reduction of 1 per cent, while the customer, if he allows his account to run for sixty days, must settle at full face value. The details of these terms of settlement might be multiplied, but would add nothing to the general consideration just advanced, which is that the terms of credit prevailing in any particular industry determine approximately the length of time for which the business man must extend credit to his customer, or in ordinary language must "carry" the latter. If a banker has a clientele consisting of wholesalers who in the spring of

the year sell their goods to customers on a credit which, as experience has shown in the past, is likely to run about sixty days, this means that the bank, in order to be of service, must stand ready to extend sixty days of credit to its customers in order to give them immediate use of the funds which they need in order to get the proceeds of goods which they have sold to customers. It is, of course, true that the bank can in individual cases encourage its customers to shorten their period of credit by various methods to which reference will later be made. But looking at the bank not as an individual institution, but as an aggregate of institutions bearing a certain relationship to the borrowers or customers as a group, it is clear that the bank's average term of credit must, if desired, be allowed to run up to the average term of credit of the commercial community or must correspond roughly with it.

II. Methods of Settlement.

In another important way the practices of the business community establish a foundation for, or limit to, those of the bank. This is seen in connection with the kind of settlement which is habitual between individuals. For instance, if it is customary, when A sells goods to B, for B to give A a promissory note, then it is evident that A's bank may expect to have a great many promissory notes of customers presented to it for discount, and will be in position to require A to indorse such notes, thereby making them what is sometimes, though erroneously, called two-name paper. On the other hand, if commercial custom is such that B will regard it as somewhat of an affront or reflection if A asks him for a note, the result will be that A's assets will consist of open book ac-

counts or "charge accounts," and that when A goes to his bank to borrow he will usually be able to offer the banker simply his own note, representing, of course, the fact that he owns bona-fide claims upon a large number of customers who are solvent and will presumably pay for the goods when their credit period has expired. In this case the business practice of the community dictates that the bank's loans shall be largely single-name paper, or "straight" notes.

This is the case, although in a somewhat different way, when A has offered B a discount for payment in cash, instead of payment at the close of, say, sixty days. In such cases the buyer B will have to arrange for the financing, and to the extent that his own funds are insufficient, will borrow from his bank and take the cash discount. Inasmuch as the cash discount is usually higher than the customary rate of interest, buyers will borrow as much as they are able from their own banks in order to pay the seller cash and receive a discount. Where this is the case, they will give their bank their own promissory note, either straight or indorsed, or, less frequently, secured by collateral of one kind or another. Those buyers who are unable to borrow will be carried by the seller in the manner indicated above, and thus the cash discount serves to divide buyers into two classes and to provide a different manner of financing each.

III. Use of Security.

The question of security is also largely determined for the banks by the habits of the customers. While it is practicable for the banker to exact in many cases special security from borrowers, this is by no means always good business policy. In some cases, in fact, it is not practicable. Good banking is not pawn-

broking or collateral lending, but is the recognition or cashing of current titles based upon values growing out of ordinary trade and unaccompanied by detailed or particular evidence of ownership of goods. Many bankers who have not enjoyed a very broad experience seem to suppose that good banking lies in making sure that every loan is protected by a claim upon property which can unquestionably be realized upon in an amount equal to the sum technically "advanced." Banking, however, in order to be sound calls for liquidity as a primary element in lending, and it is not always true that such liquidity implies or carries with it the idea of security. In such cases security is furnished by the general flow of commodities in business, and the effort to tie transactions down to a basis of direct protection is not feasible, or results in so great a delay and so much detail in connection with the advance that the assistance obtained from the loan is greatly reduced—sometimes rendered almost valueless to the recipient.

It might be supposed from what has been said that the banker had no control over the forms of security which his customer offered, but that is far from being the case. The general conditions are practically established for the banker as a result of custom or habit in the particulars already set forth, but the banker can do much to encourage the business public in improving its methods of borrowing, protecting its advances through conservative and wise management, and as opportunity offers strengthening and modifying business practice where such practice is open to doubt or criticism. Every banker owes a first duty to his stockholders and to those who have intrusted him with funds for current use. He must not unduly hazard these funds. For his own sake, as well as for the business prosperity of his bank, he must be as useful as he can to the community, but in the main he must

try to reconcile these different requirements with one another.

IV. Sources of Credit Information.

It is now time to see in what practical forms the problem of financing the business man presents itself. Probably the first question which the banker has to meet in this connection is the amount of credit which he is willing to extend to the customer. In American banking practice this is settled through the establishment of a "line of credit." The line of credit is a statement of the kinds and amounts of advance which the banker is willing to make in the case of a given concern. It can be determined only after a very careful survey by the credit department, subject to later review and confirmation by the proper officers of the institution.

Information regarding the credit standing of a borrower may be obtained directly from him or indirectly from outside sources. The borrower himself may furnish the bank with data in a financial statement which summarizes the assets and liabilities of his business, together with miscellaneous information. If any of the items in this statement are not entirely clear, they are then considered in a personal interview between the borrower and an officer of the bank. When concerns are seeking an especially large extension of credit, metropolitan banks at times retain the services of experts such as engineers and accountants to undertake an intensive inspection of the plant or business.

A bank does not rely entirely upon information which emanates directly from the prospective borrower, but also gathers facts regarding his standing from other sources. The most important of these is the commercial reporting agency. Such reporting organi-

zations are international in their scope, and through the operation of numerous branches and thousands of representatives are able to gather credit information regarding firms in all fields of business activity. The analyses of these agencies are presented in reports which give the history and a financial statement of any business regarding whom inquiry has been requested. In addition, the commercial agencies compile books which contain the names of practically all business concerns in the United States and Canada, together with an estimate of the net worth or capital and of their credit expressed in the form of a rating. Besides these general agencies, there are also special organizations which collect information concerning the firms in a particular line of business.

A bank may secure further credit information by communicating with persons who have had business dealings with the borrower whose credit standing is being considered. An inquiry is therefore addressed to banks which have carried the account or have had business transactions with the person or firm under investigation. Satisfactory information may also be secured by soliciting other concerns in the same line of business. The opinions of these firms, whether friendly associates or active competitors, are given full consideration in determining credit ratings.

Usually the individual who seeks a loan is at the same time a customer of the bank, and so additional facts can be found in the records of certain departments. From the bookkeeping department the average deposit balance can be learned, and from the loan and discount departments the history of past loans can be disclosed. An almost limitless mass of general credit information relating to applicants for loans may be uncovered in the daily newspapers and in the financial weeklies.

The information thus gathered from direct and indirect sources is collected in credit folders, each filed according to the name of the borrower. This record book contains the business history of the applicant. It also includes a complete financial statement of his current assets and liabilities, and a comparative survey of these items covering a period of several years. Interviews by officers of the bank and reports by field investigators are presented in brief. A statement is also made of the average balance and extent of previous loans of the borrower.

V. The Borrower's Statement.

While the bank thus gathers credit information from a wide variety of sources, these serve merely as checks to the borrower's financial statement or property blank which really constitutes the basis of an unsecured loan. Banks sometimes employ a general statement for all borrowers, but usually the form will vary according to the type of organization and the nature of the business. Thus large banks use separate forms for individuals, firms, and corporations, and different blanks for farmers, merchants, and manufacturers. The financial statement presents the amount of the borrower's assets and liabilities usually arranged in order of their liquidity. Analysis of these items will be made with particular reference to quick assets and current liabilities, for these are of especial interest in determining the credit rating of a prospective borrower.

a. Assets.

(1) Cash on hand and in bank. Cash on hand covers all ready money found in the safe of the borrower. As checks are claims payable on demand, they also may be considered as cash. Promissory notes of debtors or

the personal checks of business associates must not be regarded as cash items.

Cash in banks is composed of all deposits payable on demand and so will not embrace time deposits or collection items such as notes and drafts for which deposit credit has not as yet been allowed.

(2) Notes receivable. These obligations have been received from customers in payment of merchandise actually sold, and may assume the form of promissory notes or accepted drafts. This item should not include notes from salesmen, employees, partners, stockholders, or officers of the corporation. The maturity of these obligations must be current, and not past due, renewed or in the hands of attorneys for collection.

(3) Accounts receivable. A firm does not always receive written obligations from customers to whom goods have been sold, but instead these unpaid charges are entered as accounts receivable on the books of the seller. From the item of accounts receivable, the following should be excluded: (a) loans to partners or officers, (b) advances to subsidiary concerns, (c) advances to salesmen, (d) balances covering goods shipped to a selling agent or on consignment where no actual sale has been effected, (e) items long overdue or uncollectable, (f) accounts assigned and pledged for the purpose of securing loans.

(4) Merchandise and inventory. This item is composed of raw materials, goods in process of manufacture, or completely finished, which are still unsold, but actually owned by the borrower. The statement usually

draws a distinction among these three classes, for they vary considerably in their relative marketability. Raw material is more or less free capital which can be applied to various uses, and so has a wider market than merchandise in a finished state. There is only a limited demand for goods on which manufacturing operations have been performed but have not as yet been completed.

Merchandise must always be evaluated on a conservative basis. Naturally the credit man cannot accept the selling price at which the owner hopes to dispose of his goods. Instead, merchandise is appraised at its lowest value, which may either be the market price or the cost of production. The former is used in a period of falling prices, while the latter is employed during an upward trend.

(5) Investments. Cash, notes and accounts receivable, and inventory are regarded as quick assets. To this group the item of investments is sometimes added, depending upon the nature of these holdings. United States government obligations, listed bonds, and at times conservative stocks, are readily convertible into cash, but securities of a speculative nature or of affiliated companies are rated as slow assets.

(6) Plant. This class also includes real estate, buildings, machinery, and general equipment. Little consideration is given by the bank to intangible assets such as trademarks patents, franchises, leases, and goodwill.

b. Liabilities.

(1) Notes payable. These are debts which have arisen from the purchasing of merchandise or supplies. Notes payable may also represent sums which have been borrowed from banks, from the open market through the aid of note brokers, or from private individuals such as stockholders, partners, friends, and relatives.

(2) Accounts payable. Merchandise and supplies are not always purchased for cash or in notes, but may also be bought on open account. This item corresponds to the entry "accounts receivable" on the asset side of the statement.

(3) Deposits. These funds may have been left by stockholders, partners, and employees, and are subject to immediate withdrawal.

Deposits, accounts, and notes payable constitute current liabilities, which must be analyzed in relation to quick assets.

(4) Proprietorship. This includes capital stock, surplus, and undivided profits.

(5) In general all obligations which mature after the interval of one year may be safely counted as deferred liabilities. Consideration must also be given to annual sales and various reserve items.

VI. Determination of Line of Credit.

When the credit department has reported upon the standing of a given borrower, that standing must be checked and analyzed so far as practicable for the pur-

pose of detecting errors or flaws and of introducing the subsequent changes if they are called for. The final ascertainment or definition of the "line" is allotted to a discount committee in some banks, or to an executive committee, usually in consultation with the officers of the institutions. When the officers, working with the committee, have settled upon the amount to be advanced in the aggregate, the actual making of the loans up to the amount specified, and the taking of the proper protection for each, are necessarily intrusted to the executive authorities of the bank who are under its by-laws in charge of current relations with customers. It is then their duty to follow carefully and with attention the current operations of the business man in order to form a judgment whether his advances are being wisely used and whether changes in his condition occurring from time to time are of such a nature as to warrant a modification of his line of credit.

Classical banking theory has always held to the view that the limit of the bank's advances should be determined by the current turnover of the business man's operations. This may be stated in other words by saying that the bank should not advance funds for permanent use in business. Funds which are required either for investment in plant or for current working capital should be obtained through issues of stock or bonds, and should be a part of the regular assets of the enterprise. The idea may be put in another way by saying that the amount of credit which the bank extends to the business house should be determined by the amount of credit which the business house extends to others. Exactly how to ascertain this limit upon the volume of credit in any given case is a technical matter. An illustration will suffice to make clear what is meant. Suppose that a certain

enterprise is capitalized at $500,000, all of which is paid in in cash. The concern with this sum of money purchases or builds a plant worth $250,000. It invests $150,000 in machinery and equipment. The $100,000 balance of its initial $500,000 is placed in bank for the purpose of meeting current expenses. We may suppose that the concern immediately begins manufacturing and puts salesmen in the field with instructions to dispose of the goods. In advertising, in exploitation, in the payment of the salaries of salesmen, representatives, in rentals, and in various other ways it uses, let us say, $75,000 before it has begun to receive a large flow of orders. Up to this point there is no basis for an application for bank credit. The business has invested its capital, and what it has to show by way of results is either plant, equipment, or goodwill. Now it may be supposed that as the result of its operations it begins to receive a volume of orders which result in purchases of raw material, the payment of wages to labor, and in other expenditures which contribute to the actual production of partly finished goods. As the goods pass into the hands of buyers it establishes on its books accounts representing the debts due from these purchases. The concern is now a suitable applicant for bank credit and the amount to be extended by it will be limited by its expenditures for material and labor, as well as for delivery costs and the like, and will be represented by open accounts on its books. If it applies to the bank for funds it will do so in order to realize in immediate resources what is expected to come in to it within a reasonable credit period. The bank supplies these funds, and is able to do so because other business houses which are at more advanced stages of the process of production and distribution are currently depositing their receipts with it. The bank thus

equalizes the supply of available funds or of credit among the different branches of business.

VII. Oversight of Use of Credit.

As has thus been seen, when a definite line of credit has been assigned to the business man the first step has been taken toward the establishment of a fixed relationship between him and his banker. The banker, however, has a second and very important part to play in the process of financing his customer. This consists in overseeing the use of the credit and so far as possible aiding the customer in the wise employment of it. The banker is not called upon ordinarily to interfere with the doings of the business man or to exhibit an undue inquisitiveness about his transactions. It is, however, essential from his own standpoint that the credit which he extends shall be as nearly liquid as possible, and in order to attain this end he is called upon to watch carefully the transactions of his customer and to see that so far as practicable the right type of paper is made as representing given classes of advances. For example, suppose that the banker has come to the conclusion that customer A is entitled to a total line of credit of, say, $100,000. He might simply permit the customer to draw on him for this amount as the latter saw fit, giving his notes as he used the cash. It is preferable, however, that he should advise with the customer and reach an agreement as to the form which the advances shall take. Thus, it may be that the customer has drafts coming due for his spring stock of merchandise and that these amount to $50,000. By paying them immediately he can obtain a discount of, perhaps, 3 per cent. It is therefore desirable that he arrange with his banker to meet these drafts as they come in. Perhaps this will be done through a direct

loan to the customer, evidenced by his note, or, as in foreign trade, it may be accomplished by an agreement on the part of the bank to let the drafts be drawn on it, subject to immediate payment or to acceptance. However the transactions may be arranged, the fact is the bank has definitely set aside \$50,000 out of the entire line for the purpose of liquidating payments to be made for the purpose of putting goods on the shelves. Again, the customer may show in his statement to the banker that he has outstanding at all times about \$50,000 of good accounts, running perhaps sixty days. The question will then necessarily come up whether the banker ought to let him have direct loans on the strength of those accounts up to, say, 50 or 60 per cent of their amount. If so, this may mean that another \$25,000 is tentatively set aside subject to the call of the customer for the purpose of enabling him to anticipate the amounts which his customers are expected to pay him within the next few months. It may be that the business man has been in the habit of selling his goods on what is called trade acceptance; in other words, that his customers have signed acceptances at sixty days' sight when they received the goods, or it may be that he has simply sold them the goods on open account. If he has trade acceptances in his safe, it may be thought best to say to him that he may discount such acceptances up to a given percentage or to the whole of their face value, but in any case the action of the banker is equivalent to telling him that he may expect as a part of his line of credit, say, \$25,000 as against goods sold. It may be expected that this portion of his line will be increased as his sales increase, provided that the character of his own customers is as good as ever. The important point is that an allotment of credit against sales of goods has been made to him. Evidently the banker will expect to decrease the credit

which he has granted against merchandise on the shelves as the stock falls off, while on the other hand he will increase the amount of credit granted against book accounts or trade acceptances as the outstanding claims increase. A great deal has been said, in some discussions of this subject, of the relative advantages of trade acceptances and of straight notes as a basis of bank lending. This type of discussion has but little basis. There is no particular kind of paper which entitles a customer to more or less credit at the bank, and it is chiefly a matter of imagination to suppose that the conversion of open accounts into trade acceptances will permit the banker with safety to lend more largely. In considering two-name paper, the decision of the banker whether to discount or not is invariably based upon what he knows of the stronger of the two names. If the banker is financing a business man whose sales are largely to other business men whose names are stronger than his own, there may be some advantage in obtaining from the latter their accepted paper—provided he can induce them to give it, which is usually not the case. But if the business man's customers are no stronger than himself, his banker's action in discounting is determined by what is known of his own financial solvency.

VIII. Improvement of Methods of Business Finance.

On the whole, the banker's service to his customer does not consist in devising various schemes or plans to enable him to get credit, but does consist in studying his credit and determining the amount which the business man may safely use. When this amount has been settled upon, the distribution of it between different forms is primarily a matter of convenience or

adjustment to business practice. It is undoubtedly the function of the banker to try to improve business practice. This is a long process and one which must be undertaken with tact and judgment. Success in it will be obtained not by artificially substituting one kind of paper for another, but by improving the underlying basis of credit, by shortening the period of credit extension where that is too great, and by securing the adoption of satisfactory practices on the part of the borrowers themselves.

The banker, however, can and must do what he is able to help his customer obtain funds as economically as possible. This means that he should and will encourage his customer to create paper that has the widest possible marketability. For example, under the Federal Reserve system certain paper is eligible to discount, while other paper is not. If the customer can be induced to present his paper to his banker in an eligible form, the latter is then able to feel assurance that it will be admitted to rediscount at Reserve bank if desired. He is, therefore, able to convert this part of his portfolio into immediate funds wheneven he chooses, and for that reason he can afford to make a rate to the customer which is lower than he would charge were the paper not discountable at the Federal Reserve bank. In almost all cases, the customer who is doing a considerable business can put a portion of his paper into such a form and can thus obtain the advantage of the lowest market rate. Then, too, it may appear that the customer is financing his business by unnecessarily expensive methods. He may not be taking his cash discounts, but may be using his funds in other ways so that his purchases of goods are unnecessarily expensive. The banker can often show him how to reduce his costs for credit by obtaining the closest buying prices and providing him with

the funds to take advantage of them. This, of course, implies good management on the part of the business man and willingness to observe the general suggestions of the banker with respect to the distribution of his resources among the various purposes to which they may be applied in the development of the business. It may also be that the customer has fallen into the habit of granting to those who buy from him an unduly long period of credit. Analysis of his statement and comparison of his borrowing position with that of similarly situated firms in the same line of business will show where improvements can be made. The banker is probably in better position to extend help of this kind than anyone else. It is, of course, true that the bank must stand ready to help its customer in adjusting himself to the needs and requirements of the trade he is carrying on. If, for example, the customer is an importer and the foreign seller of goods insists upon being paid through the issue of a banker's acceptance, the banker must stand ready to supply credit in that form if such action is requisite in order to meet the requirements of the foreign market. Out of this grows the fact that there are many different types of paper, and that even in the most conservatively operated bank the portfolio will frequently include all or a majority of them.

IX. Open-market Borrowing.

It is frequently also the duty of the banker to explain to the business man the conditions under which he may obtain credit to better advantage from some other source. With certain types of concerns there is always the question whether better results can be obtained by seeking credit in the open market, than by obtaining it at the local bank. The notes of the borrower are

thus sold on a competitive basis, which is supposed to correspond broadly with the going rate of interest which exists generally at that time. The home bank may be too small to extend so large an amount of credit, or it may be in the habit of charging a high figure simply because it can get that from other borrowers. Perhaps, therefore, the business man may think it well to obtain a wider sale for his paper by offering it in the way just sketched. If he does so, competition is established, and the result has been to divide his credit line between his own bank and the general banking and investment field. If his banker is kept advised of the amount of such open-market advances, no harm is done from the credit standpoint, but the banker is able to regulate his own extensions of credit accordingly. Sometimes it may be well for him to advise the borrower to place his financing in the open market, through the aid of a commercial-paper house. As previously mentioned, this type of banking institution acts as an intermediary between borrowers and lenders. It purchases outright the obligations of business houses in need of funds and sells them to individuals and institutions seeking employment for surplus funds. Firms which thus borrow on the open market must possess large resources in order to attract buyers for their paper, and so their capitalization is seldom less than $200,000 when money is easy, and $500,000 or so when there is stringency. Their paper is bought largely by banks. The commercial-paper firm thus serves as an agency for the distribution of liquid capital from places where there is a surplus to other localities where there is a need.

The commercial-paper business is organized on a national scale. The bulk of the business is done by about fifteen large houses having branches or correspondents in important money centers, each with a local force of

salesmen. A large commercial-paper house thus has a turnover amounting to hundreds of millions of dollars every year, and must possess much the same characteristics as are found in a strong bank. The firm needs adequate financial worth in order to carry large blocks of paper until sold. For this purpose credit is also needed, and so it is important for a commercial-paper house to establish good banking connections. As it is lending vast sums of money to borrowers on their credit alone and without any collateral, the commercial-paper house must maintain an efficient credit department to analyze the statements and reports of firms who wish to place their obligations on the market. Also a trained selling force is essential in order to dispose of the paper which the house is handling.

The open-market paper usually takes the form of a straight single-name promissory note which is uncollateraled. It differs somewhat from the ordinary promissory note in that the maker is at the same time the payee of the obligation, which usually reads, "Pay to the order of ourselves." The note is then indorsed in blank on the reverse side by the maker himself. At times it is further indorsed by officers, who thus strengthens the obligation by adding their personal liability to the paper. The maturity of these notes is usually six months, but the time may be as short as three months. These notes are issued in even denominations of $2,500, $5,000, and $10,000, the proportions depending upon whether larger city or smaller country banks are buying the paper. The commercial-paper house imposes a charge of one-fourth of one per cent of the face value of the note, irrespective of maturity, which it deducts from the amount it pays the borrower. In all cases the borrower receives the funds at once, regardless of when the commercial-paper house sells the

paper, but in some cases the rate is "left open," and the charge to the borrower represents the rate at which the paper is actually sold plus the commission.

The commercial-paper market is an essential factor in the financial structure of the United States, where the independent banking system by itself would tend merely toward local use of funds. Because of government regulations a large borrower at the same time cannot receive sufficient accommodation from a single bank, and it is, therefore, necessary to tap outside sources of credit.

The open market also presents distinct advantages to the thousands of small banks throughout the United States. They thus possess a means of investing funds for which there is no demand in the immediate locality. By holding the obligations of firms in outside localities they are not dependent on the prosperity of home industries.

X. Relation Between Business Man and Banker in Time of Financial Stress.

One phase of the relation of the bank to the business man and the latter's financing which should be carefully thought of is the condition which exists in time of financial strain or panic. This is a matter on which a great difference of opinion has often been expressed. The bank which finds itself hard pressed by its customers is inclined to curtail its loans and cut down its commitments, and in so doing to make credit conditions more difficult for the customer. If, for example, a bank has been carrying a very large line of credit, but business depression or unemployment among depositors is leading to heavy drafts upon it so that it is losing ground, the natural instinct of the banker is that of self-preservation. In order to trim his sails,

he cuts down the new credits which he extends, or raises them so high as to discourage them. At all times it is a primary duty of the banker to keep solvent and to be able to meet his existing obligations, but in so far as is consistent with this one primary necessity the first duty of the banker is to his business customers and consists of tiding them over emergencies. This does not mean that the banker is called upon to take undue risks or to make gifts to his customers, but merely that the function of banking is that of acting as a regulator or "governor." When business depression occurs and customers find it difficult to collect the debts due them, they are obliged to ask for extensions of credit. The wise banker endeavors to "carry" them for a sufficiently long period to enable them to work out of their difficulties and to "get on their feet." If a banker is not able to take this course, the effect of hasty liquidation is often that of forcing the closing of business houses or very undue curtailment of operations, with corresponding loss of markets, sacrifice of prestige and goodwill, and perhaps permanent damage to the enterprise. Every bank is, of course, obliged to reckon upon a fixed maturity for its paper, and when that becomes impossible through the failure of business men to pay or through requests for renewals, the bank finds that a part of its portfolio is "frozen." This frozen credit consists of the notes of the enterprises which have been unable to liquidate. The banker can get cash for such paper only by forcing the business man to settle, which frequently involves, as just seen, serious loss or perhaps destruction of his business. It is in such circumstances that a rediscount institution can exercise an exceptionally helpful function in the community. By furnishing bankers with funds sufficient to enable them to carry their customers, it relieves the strain of business depression

from any particular section or group of business men and equalizes it throughout the community. It thus makes the "carrying" of sound and solvent, but temporarily slow, paper a matter for the entire banking community, as represented by an institution which combines the fluid resources of the community.

This is the same service that was performed in earlier days by the clearing houses of the United States when they arranged to issue clearing-house certificates which were practically a means of lending upon the assets of hard-pressed banks among their own number. Such work on the part of the clearing houses was often technically undertaken for the purpose of "saving" a given bank or banks, but this thought when analyzed further means that it was undertaken for the purpose of preventing such banks from the attempt to save themselves by forcing too hasty liquidation on the part of their customers. The service rendered, although technically to banks, was actually to the business community. This is merely another way of saying that, since business is a plant of slow growth, reduction or curtailment of it must also be slowly effected, and that banking is the means by which such control over expansion and contraction is exercised. The banker, therefore, has quite as serious and important a duty to perform in connection with the business which has reached the point where curtailment must take place as he has in his relations to the business which is gradually expanding and which merely needs to be fed with accommodation. It is quite true that if all banks were managed with the highest wisdom during periods of business growth, inflation and depression would probably be far less extreme than they were during 1920 and 1921. It will probably never be true, however, that we shall be able through regulation of credit, however scientific, to bring about so finely

adjusted a balance as is thus indicated. So long as there are ups and downs in business, with some enterprises expanding too rapidly, the function of the banker in cushioning the blow of business depression and preventing the spread of failures by helping to take care of the interests of those concerns which are temporarily embarrassed, will always be an important one. It is this responsibility, perhaps more than any other, which warrants the banker in demanding to be constantly informed of changes in the condition of those who borrow heavily from him.

CHAPTER IX

BANK PORTFOLIOS

I. Limitations on Lending Power of a Bank.

In studying the financing of different kinds of enterprises from the point of view of the borrower, it must not be forgotten that a general limiting condition underlying the whole question of financing the business is found in the condition of the bank and its ability to do what the borrower desires. In what has already been said it has been assumed or taken for granted that the bank had the power within certain limits to direct its credit practically into any channel that it may choose. This is true up to a certain point. There are two considerations, however, which always limit the power of the bank to lend to a given concern, and which must, therefore, be constantly borne in mind by the borrower, as well, of course, as by the banker himself, in his relations with the borrower. The first of these considerations is that the bank must, in its capacity of a semipublic institution, distribute its credit over the different classes of borrowers in such a way as reasonably to meet their requirements. It is, of course, true that a given bank may specialize in a particular kind of paper, or may confine itself largely to a particular industry or type of business. But when we consider the bank not as a single institution, but as one of a group of institutions, it is evident that provision has to be made for the credit needs of the entire community. This means that banks as a whole must

provide for filling the requirements of their borrowers, and in order to do so must keep in mind some general plan of distribution. For instance, if, in a country community where there is only one bank, that institution should concentrate its entire lending power upon a very few businesses, the bulk of the community would be left without credit accommodation. It is in order to prevent a danger of this kind, possibly resulting from the control of the bank by persons who want to absorb its entire credit-granting power, that the National Banking Act endeavors to restrict the total amount of the loans granted to any one person or corporation to a specified percentage of its capital stock. This provision of law was partly due, no doubt, to the desire to prevent the bank from "putting all of its eggs into one basket," but it was also due to the desire to insure a fairly broad distribution of credit. The second general consideration which limits what the bank can do in any single direction is that there is a well-defined necessity for preventing the unnecessary or excessive expansion of given types of business. In a competitive community there is always a danger that business will be unduly expanded or increased in some particular industry. In fact, past crises or commercial depressions have often been aggravated by undue development of one line of business, resulting in a breakdown in that line, due to the fact that too great a volume of goods was produced there and that it was suddenly realized that the demand did not suffice to carry off the goods.

When banks have allowed themselves to become too closely involved with institutions representing one principal industry, they find that a part of their credit is "frozen" or rendered unavailable because they cannot compel borrowers to realize without driving them into bankruptcy. This would result in forcing the customer to throw upon the market large stocks of

goods which could not be sold at a remunerative price, and which must wait until better conditions have been restored in that branch of business. Sound banking, therefore, dictates, not only from the standpoint of the bank itself, but also from that of the proper balancing of different lines of business, a distribution of assets and risks.

It thus becomes necessary for the banker to consider and analyze carefully the composition of his assets and to arrange them not only by maturities, but by kinds of application, on a well-ordered plan. Such a digested and arranged scheme of bank assets is called the portfolio of a bank, and the problem of the bank in connection with it is simply to develop a holding which represents different kinds of risks and a fair distribution of the bank's loans among its different classes of customers.

In working out this problem satisfactorily, the bank is largely guided by the special and peculiar conditions in its own locality. For example, let us consider again the case of the country bank of a moderate size which is alone in its community and has no competition, and which, therefore, has the greater duty of a public sort to consider all classes of demands. Such a bank, we may suppose, has seasonal requests from the farmers surrounding it for loans to be used in growing and harvesting their crops. It also has demands from dealers in a retail community for funds to assist them in meeting their purchases of goods and to some extent in carrying them. Probably such a bank will also have some call for fairly long-term real-estate loans whose proceeds are to be used in developing or purchasing properties. There may also be a local manufacturing enterprise or two which has need of the services of the bank in financing the movement of raw materials into, and of finished products out of, the plant. In

this connection, and others, also, the bank may be called upon to provide a considerable amount of domestic, and perhaps some foreign, exchange. Here is a complex problem of the division of credit.

II. Contents of the Bank's Portfolio.

The bank's object must be primarily that of insuring its own liquidity and solvency at the same time that it distributes its funds fairly and equitably among the different elements in its clientele. First of all, it needs to analyze its liabilities in a careful and scientific manner. We may assume that the bank has, let us say, $250,000 of capital and that it has succeeded in developing a deposit line of, say, $750,000. Analysis shows that of this deposit line $250,000 is in time deposits or certificates of deposit which move very slowly and are practically continuously renewed. This leaves $500,000 of demand deposits, and a study of them makes it reasonably sure that there will be a rapid turnover only, say, in the spring and again in the autumn. The bank is therefore in position first of all to invest its funds in assets of fairly long and non-liquid character corresponding to its $250,000 of inactive deposits. Perhaps it may carry a part of this amount in real-estate mortgages or it may think well to invest a portion in sound bonds or government obligations. It thus has as the basis of its portfolio some long-term securities, part of which (the real-estate securities) will not mature for a great while and hence are not liquid, while other portions (government securities) will not mature for a long time, but are very salable and hence may be realized in case of necessity. These may be considered Section 1 of its portfolio.

Behind the demand-deposit line the banker probably has an approximately equal amount of current notes and

other relatively short-term obligations. These may run from a few days up to six months or more, and it should be the effort of the banker first of all to arrange their maturities in such a way as to have them fall due steadily and successively, so as to provide him with the cash he needs to meet the current drafts upon him. For instance, if he has found that during the months of March and April of each year, and again during the months of September and October, he is obliged to make very heavy outlays, his depositors drawing on him and reducing their deposits correspondingly in order that they may liquidate indebtedness for goods, or may transfer their funds to other places, he evidently needs to have maturities of fully equal amount fall due at about that time. This is for the purpose of providing him with cash in order that he need not reduce his reserve below its normal or average level.

Section 2 of his portfolio may, therefore, be conceived of as consisting of fairly long-term loans which, however, are unquestionably payable at maturity and which have been "bunched" so that their maturities will fall due in such a way as to meet the demands which are brought to bear upon the banker at the "peak" periods.

The banker, however, has to reckon upon a regular steady flow of funds out of the bank. He is providing cash for the community, and, while he expects about an equal amount of income, he cannot be absolutely sure of it. He will therefore endeavor to carry enough paper falling due from day to day or from week to week to enable him, if he finds it necessary, to reduce his portfolio by failing to make new loans or refusing to renew old ones, and thus get in the cash which he needs to meet the regularly recurring demands to which reference has just been made. This element of relatively short-time paper, which probably consists in his

case primarily of the obligations of local merchants, may be regarded as Section 3 of his portfolio.

The banker, however, will not have been in business very long before he will find that a good many of the assets in Sections 1, 2, and 3 of his portfolio have a purely local value and market. For instance, the note of A, secured by a mortgage on his farm, could be sold to some local investor if one could be found, but it cannot be disposed of elsewhere. The note of B, a local merchant, may have been made in such a way as to have been rediscountable at the Federal Reserve bank of his district, but on the other hand it may not have been made thus "eligible." The banker in lending to B and to others in a like situation will probably endeavor to have their obligations made, so far as possible, on a rediscountable basis, but his efforts to bring that about will be only partially successful. He probably will come to the conclusion, therefore, that it is desirable for him to have in his portfolio an element of what is called "purchased paper," which means paper that he has bought outside of his own immediate community and which represents obligations of large concerns to whom he has no direct or personal relationship, and which, therefore, can be collected presumably without effort on the part of their makers to obtain extensions.

This element of paper, which we may designate as Section 4 of the portfolio, is obtained through note brokers or dealers in commercial paper in the financial sections of the country. How great it shall be is always a matter of some doubt, depending in a measure upon the extent to which the banker can actually spare funds from his community. The banker, moreover, will find that he is frequently called upon to furnish exchange, and while he may do this through his Federal Reserve bank so far as the demand is of a domestic

nature, the local factory to which reference has already been made may occasionally want a draft on some foreign country in order to purchase goods from abroad. To supply such demands the banker must either open accounts abroad or else operate through another bank which has done so, and in ordinary circumstances the latter will be the course pursued by him. He will maintain an account with, let us say, a New York bank which has foreign connections, and by arrangement with this bank he will sell exchange drawn upon those foreign connections. He may also discount the paper drawn by the local factory upon foreign buyers, and thus he may establish a small element in his portfolio which can be designated as Section 5, consisting of actual documentary bills of exchange.

If it be desired to complete the classification, we may speak of his balance with the Federal Reserve bank and with a correspondent bank or banks in neighboring cities as Section 6 of the portfolio, consisting of claims on other banks part of which are reserve and part of which, although not technically reserve, can easily be converted into that class.

III. Problems in Developing a Portfolio.

This simple analysis or outline of the country bank's portfolio is intended merely as a cross section of the bank's operations and throws no light upon the difficulties that have been encountered in developing it. As a matter of fact, the banker will always have serious problems to confront in connection with the distribution of his funds between the various uses to which they are to be put. He will almost always find that there is a larger demand for loans in the community than he thinks it on the whole wise to comply with. Were he to "tie up" his entire funds on advances on farm lands

he would soon find that he was short of means with which to meet the regular demand of depositors. On the other hand, should he confine himself entirely to local loans he might find at periods of exceptional stringency that he could not collect, and in that case he would have no assets commanding a wide market. Only experience and day-to-day observation can put the banker into position to make a satisfactory distribution of his funds as between the different elements of his portfolio. The problem becomes more and more complex as the business of the bank grows more complex, and in the case of the city banker assumes a seriousness and importance which cannot be overestimated. The proper arrangement of the portfolio in the great banks of the cities is really a primary problem in the management of the bank. It is often found that a given institution has perfectly sound and unquestionable assets, yet is embarrassed because of the fact that these assets are not adapted to produce the cash that is needed to enable it to meet its liabilities. This forces the bank to dispose of its assets sometimes at serious sacrifice in order to meet sudden demands upon it. A badly adjusted portfolio, moreover, as we have already seen, implies a bad adjustment of credit in the community as between the different elements of industry and trade.

Without attempting to emphasize more fully the importance of the portfolio from the standpoint of good banking, something should also be said of the problem of the portfolio from the larger standpoint of credit and business in general. There was a time in banking when each institution, particularly in the case of American banks, was conducted largely upon the theory that it was an entity complete in itself and independent of all others. That period has long since passed, and it is conceded to-day that no bank can establish a very

sound or satisfactory portfolio for itself without the full co-operation of others who join with it in adopting a general policy of management. It is because of the difficulty of doing this through voluntary action on the part of banks that central banking is so necessary and that the Federal Reserve system of the United States has been established. In the Federal Reserve system there is provided a means of developing a joint banking policy which, before its organization, could be supplied only by the composite action of the banks associated together in clearing houses or in bankers' associations. Such purely informal and unofficial union among the banks was always sporadic, but it was found necessary at times to enforce given lines of action in the interest of the entire community by insisting upon the adoption of certain policies on the part of the banks themselves. This attempt was never fully successful, and even when most successful was enforced only with great difficulty.

IV. Establishing a Sound Bank Portfolio.

In a general way the problem of establishing a sound bank portfolio can be solved only through a careful study of general business conditions. The time has passed when a mere inquiry into the solvency of a given concern was enough to show that its paper was safe. If at the same time other concerns in the industry are being unduly promoted by the use of the bank's credit, the effect may be a sudden expansion in that line, with the concomitant effect of overproduction of goods and the bad results that have been referred to at an earlier point. These may be avoided only through knowledge on the part of the banker regarding the general condition of trade and industry, his purpose being always that of seeing to it that no act of his results in over-

financing firms which are engaged in a line that is already fully up to the level that is permitted or rendered profitable by the demand of the community. For instance, suppose that a banker has a client, a large automobile factory, which has always met its paper promptly. The manufacturer of automobiles having been successful in producing an output of, let us say, 1,000 cars per month, is planning to recapitalize his company and to double his output. He will, however, before taking such a step, probably consult with his banker. At such a time the question is properly raised whether demand for automobiles is such as to warrant the doubling of this particular factory. It may be that, although the total supply of cars in the country is excessive, the output of a particular kind of car is still insufficient, so that the banker may well be warranted in agreeing to increase his current credit in accordance with the enlarged investment of capital. On the other hand, the banker may have his own reasons for thinking that such a step will be unwise, and by making it plain to his customer that the financing of the new enterprise will be attended with much greater difficulty he may influence the concern either to provide enough capital to take care of its own current financing or to restrict its operations, or perhaps seek to transfer them to other banks, where they may meet with the same kind of discouragement that has been offered in the first place. The result of such financing of an institution is likely to be an increase in conservatism, the producers determining not to go ahead faster than they can get assurance of credit.

This kind of careful study of industrial conditions, coupled with an analysis of the position of various kinds of industry, is coming to be a more and more important element in practical banking, and its results are having a larger and larger influence upon the direction and

volume of bankers' loans. It is clear that in so far as they operate to increase or reduce the amount of loans in any particular line, or to shift funds from one branch of industry into another, they have a very important effect upon bank portfolios. For example, after the armistice which closed the war with Germany, many American bankers were of the opinion that the disturbance of European currencies was such that they could not afford to assume commitments in foreign money. The result was a very general refusal to discount foreign bills in the United States, and hence a great reduction in the amount of such bills actually appearing in the portfolios of the banks. Analysis of the portfolios of specified groups of banks a year after the armistice seemed to show that these banks were keeping themselves almost entirely out of foreign-exchange commitments. As a matter of fact, in this particular instance, the outcome was not what had been intended, for the reason that the banks, at the same time that they failed to discount foreign bills, allowed themselves to lend heavily to export houses which carried their foreign customers on open account, so that the banks were really engaged in financing foreign trade, after all. A glance, however, at their portfolios indicated the important modification of the form of these portfolios which had been effected at the time referred to, and illustrates the extensive influence that may be exerted upon the classification and grouping of banking assets by such considerations as have just been referred to. It frequently happens that well-informed bankers reach the conclusion that a given industry is proceeding too fast, and that consequently the instruction is given to curtail the amount of investment in the paper of that industry. Such orders usually take effect first of all in the open or commercial-paper market, and the effect of them is to

reduce the marketability of the paper of the industry in question. Such paper is thus excluded from bank portfolios in a greater or less degree, and the composition of these portfolios is gradually altered.

All this may be summed up in another form of language by saying that the loan policy or lending policy of the bank is one which must be determined in such a way as to maintain liquidity and at the same time to distribute credit fairly. Such a policy must be changed from time to time as the changing conditions demand.

V. Government Restrictions on Loans.

Consideration has thus far been given to the methods which a bank may follow in establishing a sound portfolio. This policy is determined not alone by the judgment of the banker, but also by a certain amount of government control which seeks to maintain the liquidity of banks in general. Government regulation of loans takes the form either of absolute prohibition of certain types or of conditional restrictions of others. The specific provisions of the National Bank Act are designed to forbid the granting of loans which imperil the safety or liquidity of the bank. A national bank is not allowed to grant a loan collateraled by its own capital stock, nor can it purchase its own shares except to prevent loss on debts previously contracted. Real estate may be owned by a national bank only if the building is used for its own business or if the property has been acquired through the nonpayment of debts on the part of borrowers. The bank must dispose of such property acquired through default, for the stock must be sold within six months and the real estate in less than five years.

Of greater significance are the legal restrictions imposed on loans granted by national banks. These

regulations enter into the daily transactions of every national bank, and their content should be known by business men who receive loans as well as by bankers who grant them. These restrictions limit the various classes of loans in the following respects: (1) amount to one party, (2) aggregate amount of any one class of loans, (3) value of collateral, (4) maturity of obligations.

The system of independent banking which prevails in the United States has developed mainly banks of small size and there is frequently a tendency for single borrowers to receive loans entirely out of proportion to the resources of the lending institutions. As a result a bank at times holds an excessive amount of obligations due from one business enterprise, and so the welfare of the former may become entirely dependent upon the fate of the latter. The bank's safety can to some extent be insured through wider distribution of its credit risks, and so this policy is encouraged by legislation limiting the amount which a bank may lend to any one person, firm, or corporation. This limitation is usually expressed in the form of a ratio between the loan to the borrower and the capital investment of the bank. For example, the National Bank Act does not allow a loan to one interest in excess of 10 per cent of the bank's paid-up and unimpaired capital and surplus. By including the surplus in this ratio a larger extension of credit is thus permitted than if capital alone were taken as a basis.

Another set of restrictions is imposed not upon the amount of loans to single borrowers, but upon the aggregate amount of certain classes of loans which are limited to a definite proportion of the bank's capital and surplus. The total of such classes of loans to all borrowers must not exceed the entire amount of the bank's capital and surplus.

Another method of enforcing the principles of safety

through government regulation is to insist that a bank in granting certain kinds of loans shall receive collateral which offers an adequate margin. This value in excess of the loan will vary with the character of the collateral. If its marketability is restricted, its value is necessarily limited, and the bank must protect itself against loss by requiring a relatively larger margin.

These limitations on the lending powers of banks have reference mainly to their safety, but to insure their liquidity is also essential, and therefore another form of government restriction confines the maturity of certain classes of loans to specified periods of time. Consideration will now be given to the four classes of restrictions as they are applied to the following obligations: (1) promissory notes, (2) acceptances, (3) real-estate loans.

1. Loans to One Interest.

Under the National Bank Act a loan evidenced by an unsecured obligation, whether promissory note or bill of exchange, cannot exceed 10 per cent of a bank's paid-up and unimpaired capital and surplus. This fundamental limitation was continued in the Federal Reserve Act, which, however, added certain exceptions. In addition to the unsecured loan, a customer can also receive another loan amounting to 15 per cent of the bank's capital and surplus, provided the note is secured by bills of lading and other shipping documents, warehouse receipts, or other instruments conveying or securing title to readily marketable, nonperishable staples having an actual market value of 115 per cent of the face amount of the note. Thus a bank with a capital and surplus of $100,000 may grant to a customer one loan of $10,000 based on his promissory note. Assuming that he has shipped a consignment of cotton worth $17,250, he may then present the bill of lading,

insurance policy, and other shipping documents as collateral to the bank and receive another loan of $15,000 on this second promissory note.

During the recent war another exception was made to the 10-per-cent limitation of the National Bank Act. In order to encourage the sale of Liberty Bonds, Victory Notes, and certificates of indebtedness, these could be used as a means of obtaining additional accommodation from banks. Regardless of any other loans which the customer may have already received, he could obtain additional credit amounting to 10 per cent of the bank's capital and surplus, if his note were secured by not less than a like amount of government war obligations. Thus the bank mentioned above, with a capital and surplus of $100,000, could have loaned to one customer the maximum sum of $35,000 on the following three notes: (1) $10,000 on a straight unsecured obligation, (2) $15,000 collateraled by shipping documents or warehouse receipts, (3) $10,000 secured by a like face amount of government war obligations.

Certain types of loans are free from any restriction. No limit is imposed by law upon loans which a bank grants to a customer on his promissory note if it is secured by government war obligations whose face value is at least 105 per cent of the amount of the note. This suspension of the 10-per-cent limitation was regarded as a necessary measure in financing the war, but this privilege expired on December 31, 1921.

The exceptions so far discussed have been applied to loans evidenced by the promissory notes of the bank's customers. All limitations are also waived on "bills of exchange drawn in good faith against actually existing values." These instruments are defined by the rulings of the Federal Reserve Board as drafts secured by a complete set of shipping documents which convey a clear title to goods already shipped or

in process of shipment. Such bills of exchange also include bankers' acceptances eligible for rediscount under Section 13 of the Federal Reserve Act. The bank is also unrestricted in extending credit to a borrower if it discounts commercial paper which he has received from his customers in the course of his business and actually owns. Thus promissory notes or bills of exchange which evidence debts due from other persons may be offered by the borrower and discounted by the bank.

The absence of any limitations on the three types of loans described above has been justified on the ground that the lending bank is given adequate protection. This protection depends upon the following factors: (1) amount of the margin or excess value of collateral, (2) the value of the business transaction on which the obligation is based, (3) the credit standing of two parties—maker in the case of a note, acceptor in the case of a draft, and indorser of both instruments.

2. Aggregate Amount of Acceptances.

The above analysis has viewed only regulations limiting the amount of loans which a bank may grant to one borrower. Other restrictions apply to the aggregate liabilities which a bank may assume to all its customers in making acceptances. National banks were first given the right to accept drafts by the Federal Reserve Act. Under the provisions of this statute, a national bank may accept in behalf of its customers bills of exchange to a total value of 50 per cent of its capital and surplus. This power to accept drafts may be augmented to 100 per cent of the capital and surplus of the bank if the petition for this privilege is granted by the Federal Reserve Board. A bank may accept drafts arising out of transactions in foreign as well as domestic

trade. While the total of these foreign acceptances may possibly equal 100 per cent of its capital and surplus, or its maximum acceptance liability, in no event may the domestic bills of exchange amount to more than 50 per cent. Acceptances based on foreign transactions may have a maturity of six months, but those growing out of domestic business may not run longer than three months. Banks engaged in international trade financing may accept drafts to create dollar exchange in certain foreign countries, provided that the aggregate of the additional drafts does not exceed 50 per cent of their combined capital and surplus, and does not have a maturity longer than three months, or one-fourth of a year. Thus a bank with a combined capital and surplus of $1,000,000 may incur a total acceptance liability of $1,500,000, constituted as follows: (1) $500,000 on acceptances arising out of domestic transactions, (2) $500,000 growing out of foreign transactions, and (3) $500,000 on acceptances drawn to create dollar exchange. Also, 1 and 2 may be combined so that the total of foreign acceptances will amount to $1,000,000, or 100 per cent of the bank's capital and surplus.

3. Real-estate Loans.

The third class of restrictions is based on loans secured by real estate. Such security for a loan was prohibited absolutely under the provisions of the National Bank Act, but the Federal Reserve Act removed this restriction by conferring the right to grant such loans upon all banks located outside of the central reserve cities of New York, Chicago, and St. Louis. Real estate has the defect of possessing only a limited marketability, and to prevent a bank from lending too heavily in this direction the Federal Reserve Act imposes several

restrictions on these loans. Their aggregate to all borrowers must not exceed either 25 per cent of the bank's capital and surplus, or 33⅓ per cent of its time deposits. In every case the loan must not be over 50 per cent of the appraised value of the property. The maturity is limited to five years on farm land, which must be improved and unencumbered, and to one year if based on other real estate, such as improved property. In order to confine these loans to the vicinity of the bank, the property must be situated within a radius of one hundred miles.

These legal restrictions on the loans of national banks may be summarized in the following tables:

EXAMPLES OF WHAT A NATIONAL BANK MAY LEND AT ANY ONE TIME TO ANY ONE CUSTOMER UNDER THE AMENDMENT TO SECTION 5200, APPROVED OCTOBER 22, 1919 EXPRESSED IN TERMS OF PERCENTAGE OF THE BANK'S CAPITAL AND SURPLUS

	Illustration 1	Illustration 2	Illustration 3
Accommodation or straight loans	10%	5%	5%
Notes secured by warehouse receipts, etc.	15%	20%	15%
Notes secured by a like face amount of Government obligations	10%	10%	15%
Total	35%	35%	35%
Bills of exchange drawn against actually existing values	No limit imposed by law.		
Commercial or business paper	No limit imposed by law.		
Notes secured by at least 105% of U. S. Government obligations	No limit imposed by law.		

LEGAL LIMITATIONS ON LOANS BY NATIONAL BANKS

Character of Loans	Rate Per Cent of Capital and Surplus Loanable to One Interest	Rate Per Cent of Collateral to Amount of Loan	Rate Per Cent of Capital and Surplus Loanable in the Aggregate	Maturity of the Obligation in Terms of Years
1. *Promissory Notes.*				
(a) straight—unsecured.....	10	....	no limit	....
(b) secured by warehouse receipts or shipping documents.......	15	115	"	....
(c) secured by government war obligations.......	10	100	"	....
	no limit	105	"	....
2. *Bills of Exchange*				
(a) unsecured...	10	....	....	....
(b) secured by shipping documents "based on actually existing values"—foreign transactions.	no limit	....	100	½
domestic transactions.	no limit	....	50	¼
(c) create dollar exchange....	10	....	50	¼
Commercial or Business Paper Owned.	no limit	....	no limit	....
3. *Real-estate Loans.*				
(a) farming property........	10	200	25, or 33⅓ of time deposits	5
(b) improved property....	10			1

CHAPTER X

RESERVES

I. Meaning of a Reserve and Reserve Policy.

In dealing with bank reserves thus far the subject has been spoken of as if the reserve of a bank were more or less a self-regulating factor in its business. In some countries, notably our own, the law regulates the amount of reserve which is required, and in others local custom controls it in a degree which is quite as strict as our legal requirements. It remains true that the reserve of a bank has a very special relationship to the position of the bank itself, while the reserve level or ratio is by many persons taken as an indication of the strength of the institution. Because of this peculiar position of the bank reserve it is worthy of special study both from the standpoint of theory and from that of practice.

As has already been seen, the reserve of a bank is easily conceived of as the ultimate cash or legal tender which the bank holds for the purpose of meeting its obligations which are presented to it for redemption. In most discussions of banking, therefore, there is quite a distinct implication that a reserve is a fund of cash which is held by the banker for the purpose of making payments on demand. Further study, however, shows that this view of the case, although correct enough when reference is had to an individual bank which has no connection with any other institution, is hardly adequate if the bank under consideration is a member of a system or series of institutions. For example, under

the National Banking Act prior to the adoption of the Federal Reserve Act, it was expressly provided that three-fifths of the country bank's reserves might consist not of cash in vault, but of deposit accounts with other banks. At the present time under the Federal Reserve Act cash in vault is not legally counted as reserve, but only the bank's balance on the books of the Federal Reserve bank. True, the bank which has cash in hand can at once convert it into reserve by depositing it with the Federal Reserve bank, but so long as the cash is held in vault it is not technically reserve. Thus it appears that under certain circumstances the bank's reserve consists not of cash at all, but of credit with other banks.

In the same way it is evident that if a bank possesses claims which are cashable at sight it is in as strong a position as if it had actual cash. For example, if a bank has on an average one million dollars of checks presented to it through the clearing house and has no offsetting claims with which to meet them, it must expect to see its reserve reduced by one million dollars. If, however, it has claims on other banks of equal amount, the cashing of these checks has no effect upon its reserves, which remain the same. Here is another application of the thought that interbank credit is frequently a satisfactory form of bank reserve. How this idea is developed in the actual computation of member bank reserves has been elsewhere explained in connection with government regulation and need not be enlarged upon here.

One further development of the reserve idea needs, however, to be noted before leaving this phase of the subject. A bank may have in its possession paper made by solvent institutions, firms, or individuals, which is not payable at sight or on demand, but which under central bank arrangements is convertible into a

reserve credit through the process of rediscounting. In that event—assuming that the reserve institution stands ready to rediscount such eligible paper practically in any quantity desired—the bank may be warranted in regarding its holding of such paper as in effect equivalent to reserve. This fact is expressed in the familiar term which refers to the "secondary reserve" of a bank, meaning thereby items of assets which can quickly be converted into means of payment. Summing up, we may say that in modern banking the bank reserve includes all these parts of the bank's assets which are available for meeting demand obligations. They may be actual cash in hand, or cash with another bank, or rediscount credit on the books of another bank, or unquestionably eligible items ready for rediscount.

With this understanding or definition of the term "reserve," the analysis of it becomes considerably easier. By a bank's reserve policy is meant the policy of the bank in dividing its assets between quicker and long-term obligations. A bank's reserve is low when the bulk of its funds are in obligations which cannot be realized for some time to come. It is high when the proportion of its assets in immediately available form is large. The "reserve ratio" which is often spoken of with reference to banks is obtained by dividing the quantity of actual cash or available bank credit which the institution owns by the amount of its demand liabilities. Thus, for instance, if bank A has on its books $100,000 of demand deposits and has outstanding $50,000 of notes, it may evidently be called upon at any time to pay $150,000. Now, if this bank has in its vaults $75,000 in cash, it has a reserve of 50 per cent. If, under the Federal Reserve system, it has $75,000 credited to it by its Reserve bank, it has a reserve of 50 per cent. In the case of the Reserve bank itself, only the cash on hand is figured in estimating reserves.

In order to keep a bank solvent it must evidently maintain in available or liquid form such a part of its assets as will under any probable conditions enable it to meet the demands that may be presented to it. These may be notes offered for cashing, or checks drawn upon it by depositors and presented by other banks. Exactly how large a proportion of such demands will be presented at any time is a matter which can be determined only by experience. The Federal Reserve Act requires central reserve city banks to keep a reserve of 13 per cent against their demand deposits with Federal Reserve banks, but it is assumed that the banks will maintain in their portfolios a considerable additional amount of eligible paper which may be rediscounted at any time. Before the Federal Reserve Act was adopted, such banks were required to keep in their own vaults a cash reserve of 25 per cent. In the central banks of Europe, prior to the outbreak of the war, it was not infrequent to carry reserves ranging from 60 to 70 per cent of demand liability. Yet in England the joint-stock banks frequently allowed their reserves of cash in vault to run below 5 per cent of demand liabilities, trusting to replenish them, if necessary, through credit obtained at the Bank of England. From all this it is clear that there is great variation between different banks in regard to the amount of reserve needed or called for, and that the amount thus required depends a great deal upon the character of the bank's business and the attitude of its clientele at any time. Maintenance of a proper amount of reserves is thus the outcome of knowledge on the part of the banker concerning the needs of his community, and in no small measure the result of experience and observation of local habits and customs. A much larger reserve, for example, must be carried in a factory town where large numbers of employees are paid off on Saturday night, than is

necessary in a neighboring residential suburb where there is little demand for cash and where payments are largely made by check.

II. Maintenance of Reserve.

Supposing, however, that a banker has, through experience, guided by legislative requirements, determined the approximate amount of reserve which he needs to carry in ordinary circumstances, it will be a matter of constant watchfulness on his part to see that he is able to maintain the proper balance between quick and slow assets. If, for example, a number of his customers are obliged to ask for extensions of credit, he does not receive payments either in the form of checks on other banks or cash or of reduction of his own outstanding liabilities that he may have counted upon. He thus finds that his liabilities are larger than he had expected in proportion to his quick assets. On the other hand, if he is too conservative he may find that he misses much good business by holding his customers to too short a period of credit, thus obliging them to go to other banks which are more liberal, although he might with reasonable safety have carried such paper in his portfolio. Good banking always provides an adequate means of liquidating claims, but profitable banking prevents these means from becoming and growing into a dead weight upon the institution as the outgrowth of undue conservatism.

If, however, as often happens, a community becomes involved in long-term credit operations and a given bank has allowed itself to undertake operations that are really beyond its strength, the result is a tendency to cut down the available short-term assets and especially the cash or credit available for payments, with the consequence that some means must be found

of restoring them. Every banker has at times to contemplate the necessity of employing these means. In general it is a choice between the following courses of action:

1. To suspend or refuse further applications for credit from customers;

2. To discourage customers by raising his rate of discount in such a measure as to drive away the less necessary applications;

3. To discount some of his paper with another bank or to sell to that bank a part of his assets;

4. To purchase or acquire specie, perhaps abroad, or in unusual cases at home, paying for it in securities or long-term assets, and in return receiving a shipment of actual coin or currency.

All of these methods are at times employed by bankers in the process of restoring depleted reserves. The question which method to employ and how to employ it is, however, a problem which involves the full issue of sound and careful banking management.

1. Refusal of Further Credit Accommodation.

If the banker resorts to the plan of refusing to accommodate his customers merely because his reserves have fallen below a desired limit, he has cut these customers off from credit which may be absolutely essential to their continuance in business. He has thus taken a step of very serious character and one which can hardly be warranted save under the absolute necessity of preserving the integrity of his own institution or of meeting the demand obligations which he has already outstanding. The banker's first duty, not merely to himself and his stockholders, but to the community, is that of keeping open his doors and meeting all demands upon him as presented. Everything else must be subordinated to this. It is a more or less secondary

matter that the bank is thoroughly solvent and that the depositors will eventually be paid in full.

If the bank once closes, general confidence has been correspondingly impaired, and if the bank remains closed all of its depositors are deprived of the immediate use of funds upon which they have been relying to protect themselves. This may cause absolute disaster to them, especially if they are not able easily to open new banking connections, as they probably will not be. Therefore it is clear that there may be times when the absolute refusal of further credit by the banker in order to protect what is left of his reserve and enable him to meet the claims of depositors and others is essential. This, however, will be the unusual case, and indeed it is often true that the refusal of loans by a banker gives a perhaps unwarranted impression of weakness on his part, with the result of destroying confidence and starting "runs" which may wreck even a very strong and well-protected institution.

2. Advance of Discount Rate.

In lieu, therefore, of refusing credit, it is customary with bankers to advance the rate of discount for the purpose of inducing the less necessary credit applications to be withdrawn. The plan in ordinary circumstances is quite successful, since there are always applicants who are on the margin of doubt whether to borrow, or at all events whether to borrow as freely as they are inclined to do. Such applicants are discouraged by the high rate of discount, which takes the profit out of the "marginal" element of their business, and when rates are high and conditions of borrowing stringent they are likely to limit their operations. In very acute conditions of crisis or stringency, however, there is less doubt whether the application even of a rather high rate of discount will be successful. The

idea of rationing credit—that is, of investigating the purpose for which applications are made and of granting only those that are definitely necessary—is frequently resorted to as a modification of the plan first suggested—the absolute suspension or refusal of further accommodation. It may be said, however, that the banker's duty is that of continuing to accommodate his customers even in times when his reserve is being seriously infringed upon, and that the very purpose of the reserve itself is to enable him to continue extending this kind of accommodation—that this is, in fact, its highest function, cash being kept on hand for the very purpose of dealing with unusual calls for aid.

3. Rediscount of Paper or Sale of Assets.

So clearly is this obligation recognized by most bankers that they will not usually refuse credit or even attempt to ration it in too narrow a way unless there is very good reason for doing so, but instead of resorting to such a method of restriction will ordinarily resort to the process known as rediscounting. Under conditions in which the rediscounting process is purely voluntary—that is, in which it grows out of an ordinary business relationship between banks—it may not be as reliable a means of relief as is necessary to meet the situation. In those countries where central banking exists, or where, as in the Federal Reserve system, there is a co-operative union of banks whose purpose is primarily that of mutual accommodation, the case is quite different. Such central or co-operative banks have the definite duty of relieving other banks through rediscounting, and if they are well managed they have endeavored to conserve their resources throughout with that purpose in mind. They are, therefore, in position to rediscount—to help the bank which applies to them by giving it credit upon its own paper with the indorse-

ment of the applying bank. The central bank does for the individual bank what the individual bank does for its customers, and does it at a time when the individual banker needs funds. It thus enables the individual banker to avoid the necessity of rationing or restricting credit, although ordinarily rates of discount are so stated that the rediscounting process implies an element of greater cost or expense, which results in the raising of the rate to the would-be borrower.

Alternative with the idea of rediscount is that of disposal of assets. The banker may have carried in his portfolio, say, some government certificates of indebtedness or Liberty Bonds, and these he may sell outright in order to realize cash when the necessity comes. In this case he employs exactly the same method that was used when he rediscounted, except that instead of resorting to another bank he goes to the open market for what he needs.

4. Purchase of Specie.

Under some circumstances the demand on banks may be such as to necessitate a more drastic operation than that of rediscounting. It may be necessary to acquire or purchase specie by importing it. For instance, assume that a country has for a long time been suffering from an adverse balance of trade which has exhausted its specie stock. As a result we may suppose the specie reserves of all banks in the country have become very low. A stringency developing or severe demand for cash continuing, the prospect is that some or all of the banks may find their specie stock exhausted, with the result that a suspension of specie payments by common consent may be necessary; or, lacking this, that some banks will be unable to maintain specie payments and unable to obtain more specie from other banks, so that they will fail, with

the injurious results to be expected from such action. In these circumstances it is necessary for the banking system of the country as a whole to get aid from abroad, and it may do so either by disposing of securities to foreign investors, or by rediscounting some of its own paper in foreign countries, or by protecting the foreign banks in any other way that will induce them to transfer a part of their specie. When such specie has been received the banks obtaining it have correspondingly strengthened themselves and are in a position to proceed with their business upon a conservative basis, meeting their obligations as requested by their customers and granting new accommodation moderately to those who require it.

This is a kind of international rediscount process which involves the transfer of specie. In ordinary domestic rediscounting no such transfer is necessary because the country within which the operation takes place is operating upon a single uniform standard of value, and a credit granted, say, in New York is easily made available in Texas. The case is different when a transaction of the kind occurs between two independent banking systems which operate upon a different currency basis, so that an actual shift of resources from one to another is necessary. Something of this kind is seen in the Federal Reserve system at times of stringency. Under the Federal Reserve Act, provision has been made whereby one Federal Reserve bank which finds its reserve running down is enabled to rediscount, through the Federal Reserve Board, with other Reserve banks. The effect of the rediscount is to transfer gold from the account of the bank granting the rediscount to the account of the bank applying for it, thus cutting the reserve of the granting bank and increasing the reserve of the applying bank. This, as will be apparent to students of banking theory,

cuts down the volume of further credit supply in some parts of the country and increases it in others. The outcome is to readjust the specie resources and the outstanding banking credit of the different parts of the country, and so to bring about a better and fairer balance between them. The method is analogous to the process of acquiring specie by importing it, which is resorted to when one country goes to the banks of another for help.

III. Inflation and Deflation.

In studying the reserve policy of banks it is worth while to devote some attention to what is called inflation and deflation. By the former term, when used in banking discussion, is meant the undue or disproportionate increase of bank credit. By deflation may be meant either the curtailment or destruction of inflation, or the term may be used to mean the reduction of bank credit below the normal permanent level. How is it that inflation grows up, and what is its relation to the reserve question? Suppose the existence of a bank which stands alone in its community, and which is maintaining a safe business with a reasonable balance between income and outgo. We may assume that this bank has on hand at all times a reserve fund of 25 per cent of demand deposits. This bank has many calls upon it from customers about whose operations it feels some doubt. It, however, becomes gradually more liberal and makes a considerable number of loans which, although well secured, are not paid at maturity, but are renewed. The effect is to increase the deposit line of the bank and, relatively speaking, to decrease its reserve balance. For example, it may be supposed that on July 1 of a certain year the bank has outstanding $500,000 of deposits and has $500,000 of customers' notes, of which,

let us say, $50,000 are falling due. Of the makers of this $50,000 of paper, however, one-half, represented by $25,000, ask for renewal. The bank, however, has to meet on the 1st of July obligations of one kind or another which require $50,000 cash. Evidently if it obtained the payment of the $50,000 of notes it might cut down its deposits to $450,000 or might meet the obligations presented by the use of the payments made to it. In the one case, its position would be stronger than ever because it would have its 25-per-cent reserve (25 per cent of $500,000) intact, though it would have cut its discount line to $450,000. But the bank, we may assume, yields to demands for renewal to the extent of $25,000 and hence has to lose $25,000 in cash. Here it has increased its deposit liability relatively to reserve in order to extend a longer credit to its customers. When this kind of operation occurs on an increasing basis, and especially when it occurs as the result of loans made by the banks upon long-term securities such as bonds, mortgages, stocks, etc., and not as a result of commercial transactions, the result is usually described as an inflation of bank credit. The effect of it may be in some instances to cause an increase of prices through the action of the owners of the deposit accounts in demanding goods for which they pay in checks on the bank. If there has been no corresponding enlargement of the amount of goods in the community, and if the goods thus bought with bank credit are unproductively employed, the result is to decrease the amount of goods in the community relatively to purchasing media, and the tendency toward an upward movement of prices is then evident. In such a case we have what is called price inflation, and in the instance cited such price inflation may be more or less directly associated with bank-credit inflation. This situation evidently touches closely upon the reserve condition, since the latter

usually acts as a kind of barometer, indicating when the outstandings of the bank are liquid. If the reserve ratio falls off, showing that the supply of cash on hand is smaller as compared with outstanding deposits, that may be due to inflationary operations on the part of the bank. While this is not always true, it is likely to be so when the decline in reserve occurs over a large area or group of banks or at a central bank. Such a decline is then in fact an index of inflation, and it usually follows that such inflationary conditions are associated with a rise of prices.

Deflation is a word less frequently heard than inflation, but is correlative with the latter term. As employed in banking it means the elimination from bank portfolios of loans which have been made on an unduly long or unquestionably investment basis. It should be remarked at this point that the line of distinction between sound or normal bank loans and those which are inflationary in whatever degree is not absolute, but the result of experimental observation in any particular circumstances. It is a matter which calls ordinarily for a discriminating study before positive conclusions can be reached in any given case. Generally speaking, deflation, however, is usually employed as a term which denotes the restoration of a safe or satisfactory balance between outstanding demands upon banks and their reserve protection. In countries which are organized on a central banking system this process of deflation may involve the reduction of rediscounts carried by commercial banks with the central reserve bank. In such circumstances there is ordinarily a decline in the bill holdings of the central reserve bank, and at the same time a decline in the assets and deposits of the rank and file of the banks. The result of deflation is thus to leave a smaller amount of credit at the disposal of the public as measured in dollars. It should be remembered,

however, that the significance of inflation or deflation is found primarily in connection with the price level. For instance, if with the price level denoted by about 100 there is in existence one million units of bank credit, it may be roughly true that a decline in the price level to, say, 50 would permit a decline in the number of credit units employed to five hundred thousand without causing any relatively lessened use of bank credit. Of course it should be remembered that it would be rarely, if ever, true that any such close arithmetic correspondence as is indicated by these figures could be established between credit and the volume of business, but the general trend would be in the direction suggested.

Inflation and deflation are therefore relative terms which can have a direct meaning only in comparison with price levels. Since bad banking or inflation itself reacts upon a price level, a rather complex problem is presented at any given moment in the effort to ascertain how far inflation has proceeded beyond the amount indicated by prices. So also in the case of deflation it is difficult to decide at any moment whether there is a "shortage of credit" or whether what has happened has been merely the diminution of the aggregate number of units of credit rendered possible by the decline in prices followed by a lessened demand for credit to carry goods.

This whole subject may be summed up in broad terms by saying that there is at any given moment a general level of prices which has been determined by a comparison between goods on the basis of their relative values as expressed in terms of money. Departures from this level, either above or below, may be due to any one or several of a number of factors working upon the price level. When a change in the method of granting credit operates as such a factor the result is spoken of as inflation or deflation, as the case may be.

CHAPTER XI

THE BANK STATEMENT

I. Significance of a Bank Statement.

Consideration has been given in preceding chapters to such commercial bank operations as the receiving of deposits and the granting of loans. These transactions are all recorded in the general ledger of the bank. A summary of these records is of value to the bank officers, government, and the public, and so from the general ledger there is compiled a trial balance sheet known as the bank statement.

The Comptroller of the Currency, and also state superintendents of banking, periodically demand statements to aid the government in supervising banking institutions. Every national bank is required by law to insert its statement in the local press at regular intervals throughout the year, and, in fact, this notice appears quite frequently for its own publicity value. These advertisements present a systematic and classified tabulation of assets and liabilities, and prospective depositors may thus judge the solvency of the bank. A report of the previous day's business may guide the bank's officers in determining such policies as the granting of new loans and the renewal of old notes. Banks in general are also interested in the statements of other institutions, for interbank borrowing is conducted on an extensive scale. In closing this chapter, consideration will be given to the way in which banks analyze the statements of other banks which are seeking loans.

The daily statement by itself has only a limited significance. It presents merely a static picture of the bank's condition on a particular day, and should be compared with previous reports to study the true financial history of the bank for the purpose of analyzing the trend in deposits, loans, and other items. The statements of a particular bank have added interest when viewed in relation to those of other institutions. Such reports are combined in several forms. The large clearing houses compile weekly statements showing the financial status of their members, while the Federal Reserve banks and Federal Reserve Board report on a selected list of member banks. The Comptroller of the Currency as well as the state superintendents issue annual summaries presenting the condition of banks throughout the country, as shown by the returns of the examiners and the statements of the banks. These publications offer an excellent basis for interpreting general financial tendencies.

The present chapter deals with the statement of an individual commercial bank. Its report as usually presented in the daily newspaper does not contain sufficient details for a complete analysis, and so the items as given in the form for national banks used by the Comptroller of the Currency will serve as a basis.

II. Assets of the Bank.

The assets or resources are composed of all the items which are in possession of or due to the bank, and it relies upon these assets to meet the liabilities which it owes to others.

Loans and Discounts. These include the amount of credit extended by the bank to its customers. These obligations are in the form of promissory notes or accepted drafts. They may be secured by stocks,

bonds, and other collateral, or based merely on the credit standing of the makers, acceptors, or indorsers. Some of these advances are payable on demand and so may be called for payment whenever the bank is in need of funds. In addition to loans extended to customers, the bank also grants credit to outside firms in buying their commercial paper on the open market. These claims are sometimes entered separately as "bills purchased."

Overdrafts. These may be regarded as loans obtained from the bank, usually without security, interest, or consent. An overdraft occurs when a customer writes a check to an amount which exceeds the sum credited to his account. The amount paid by the bank in excess of the customer's balance is known as an overdraft. It is evidenced merely by an entry in the books of the bank, but not in a note or other formal instrument. National banks are prohibited from voluntarily allowing overdrafts to their customers.

Customers' Liability under Letters of Credit and on Account of Acceptances. Foreign trade is financed largely through drafts drawn on banks which accept them in behalf of their customers. They in turn assure their bank that it will be fully reimbursed before the acceptances fall due. The obligation to reimburse is expressed either in the form of contracts for letters of credit or acceptance agreements which clearly define the liability of the customers to the bank. This account is therefore an offset to the item "letters of credit and acceptances outstanding" of the bank's liabilities.

United States Bonds and Certificates of Indebtedness. The bank is required to invest in certain classes of United States bonds if it wishes to issue its notes for circulation. It is also compelled to hold either of these classes of obligations as security for deposits

which the United States government carries with the bank. States and municipalities also require banks acting as depositories to hold government issues as security. In addition, banks voluntarily invested in Liberty Bonds and Victory Notes, during the war, because of patriotic motives, and have continued to hold these obligations because of their ready marketability.

Bonds, Securities, etc., Other Than United States. These items are held by a bank as outright investments or as acquisitions resulting from nonpayment of loans for which these securities have served as collateral.

Stocks, Other Than Federal Reserve Bank Stock. These stocks have also been obtained from borrowers defaulting in their obligations. National banks are forbidden directly to purchase stocks because of the instability of their value. National banks may, however, purchase a certain amount of stock of corporations engaged in foreign banking.

Stock of the Federal Reserve Bank. Each member of the Federal Reserve system must subscribe to the stock of the Reserve bank of its district to an amount equaling 6 per cent of its own capital and surplus, but only one-half of this sum has been called by the Federal Reserve Board.

Banking House, Furniture and Fixtures. These items represent the general equipment of the bank.

Real Estate Owned Other Than Banking House. As a commercial bank is obliged to pay most of its deposits on demand, its investments, in turn, must have short maturity. A national bank is therefore not allowed to purchase real estate for any other purpose than actual use in conducting its business. At times it is forced to accept real estate pledged for loans on which the borrowers have defaulted.

Due from Branches. Subject to limitations, banks

may conduct domestic and foreign branches which thus represent a certain amount of invested capital.

Lawful Reserve with the Federal Reserve Bank. This represents the balance which the bank carries with the district Federal Reserve bank for the purpose of maintaining the required reserve against deposits.

Items with Federal Reserve Bank in Process of Collection. This account includes checks, drafts, and other items which have been remitted to the district Federal Reserve bank for collection. From one to eight days are allowed for the collection and payment of items drawn on any locality in the United States, and in accordance with this time schedule each Federal Reserve bank credits the account of its members with the amount of items left for collection. Thus all items in process of collection are really deferred credits with the Federal Reserve bank, and only when paid become cash credits or lawful reserve.

Cash in Vault. A bank needs a certain amount of till money to cash the checks of customers and to meet their current demands, such as for pay-roll purposes.

Net Amount Due from Other Banks, Bankers, and Trust Companies. These institutions are correspondents collecting out-of-town items not forwarded through the agency of the Federal Reserve system. A bank usually carries a deposit balance with each correspondent, which credits the account when collection items are actually paid.

Exchanges for the Clearing House. These will be presented for payment to the other members of the clearing house on the following morning.

Checks on Other Banks in the Same City. As not all banks belong to the clearing house, checks drawn on these institutions must be presented through messengers.

Redemption Fund with the Treasurer of the United

States. A national bank which issues notes for circulation (national-bank notes) must contribute a fund amounting to 5 per cent of these notes in order that the Treasury Department can redeem them when presented by the holders.

Due from the Treasurer of the United States. In the course of its daily business, a bank receives government paper money which has been mutilated while in circulation. Such bills are forwarded to the Treasury, which in exchange returns new ones.

Interest Earned but Not Collected. When a bank grants loans to its customers, they pay the interest usually at maturity, although it gradually accumulates or accrues during the entire period for which the loan runs. Thus interest returns on loans and also on investments are regarded as accrued assets, although payment has not actually been made.

III. Liabilities of a Bank.

The following are the bank's liabilities or obligations which are due to its stockholders and creditors.

Capital Stock. At the organization of the bank, its shares are purchased by individuals, who must pay cash for them. The bank thus becomes accountable to the shareholders for the amount of the capital stock and hence it is carried as a liability. The original capital stock may be augmented from the surplus if the earnings of the bank justify this policy. Capital stock is a safeguard to depositors, for the sum which it represents can be applied to settle claims against the bank in case of insolvency.

Surplus. Surplus also may be the result either of payments originally contributed by stockholders or profits gradually accumulated by the bank. Surplus acts as a means of providing additional working

capital for expanding the business of the bank, and also operates as a bulwark for meeting possible losses.

Undivided Profits. These are earnings which have not been distributed to stockholders nor carried over to surplus, but retained as a buffer in case of emergency. Capital stock, surplus, and undivided profits are items grouped together under the term "capital investment." All three are closely related, for undivided profits flow into surplus, which in turn may be added to capital stock. In the event that other assets are insufficient to satisfy the claims of creditors, undivided profits are first used, and if necessary the surplus is next attached, while only in an emergency is the capital stock impaired, for such step may bring the bank to dissolution. So the greatest fluctuations occur in the item of undivided profits, and the least in capital stock. The capital investment does not consist of actual cash, but is the result of bookkeeping entries, and merely expresses the excess value of the bank's resources over its liabilities. The same thought is conveyed in the bookkeeping formula: resources = liabilities + net worth of the owners of the business. Thus the two sides of a bank statement are always made to equal each other by either increasing or decreasing the amount of capital investment.

Dividends Unpaid. These have been declared by the bank, but for some reason have not as yet been withdrawn by the shareholders, who have a direct claim on these sums.

Discount Collected but Not Earned. When a bank discounts a customer's note, the interest charge is deducted in advance. The amount is not really earned by the bank until the date when the discounted paper matures. While the bank thus has possession of the sums arising from these discounts, they are not the property of the bank and so are carried as liabilities.

This item is the inverse of the account "interest earned but not collected."

Amount Reserved for Taxes Accrued. A bank, the same as any other corporation, must pay several kinds of taxes. The federal government levies the national income, excess-profits, and usual corporation taxes upon all banks. If a bank issues circulating notes, these instruments are also subject to a federal levy. The state government also taxes bank stock, since it is a form of personal property. All real property, such as bank building and ground, is assessed and taxed by the local government. Although the bank pays these taxes at different times throughout the year, the total amount can be estimated from past payments and a proportionate sum is usually set aside each month to anticipate this expenditure. This item, as well as the two following, are called accrued liabilities.

Amount Reserved for Interest Accrued. Another important item of expense is the payment of interest due to customers on daily balances or on their certificates of deposit, and to others who have loaned money to the bank.

Amount Reserved for Expenses Accrued. A large bank usually compiles a budget covering salaries, supplies, and general expenses of operation. It is thus able to estimate annual expenses and distribute this amount in monthly or weekly installments throughout the entire year.

Circulating Notes Outstanding. National banks are still permitted to issue circulating notes based on the security of certain United States bonds, and this account represents the bank's indebtedness to holders of its notes.

Net Amounts Due to Other Banks, Bankers, and Trust Companies. These institutions are carrying demand

deposits with the bank in order to maintain balances against which drafts may be drawn.

Demand Deposits. They are balances left by individuals or corporations and can be withdrawn on demand or on notice of less than thirty days. They are created either through cash deposited by customers or through credit extended by the bank.

Time Deposits. This item includes savings accounts and certificates of deposit which cannot be withdrawn on demand without the consent of the bank, but are payable after the bank has received notice of thirty days.

United States Deposits. Funds derived from postal savings or from internal and external sources of federal revenue are deposited in banks throughout the country.

State, County, and Municipal Deposits. Local governments also use the banks as depositories of funds.

Certified Checks Outstanding. When a bank certifies a check drawn by a customer, it charges the amount to his account and assumes the obligation for payment. The instrument then becomes the direct liability of the certifying bank.

Cashier's Checks Outstanding. These items are drawn by the cashier on the bank itself. Such instruments are used to remit funds, to give borrowers the proceeds of loans, or to pay the general disbursements of the bank.

Bonds Borrowed. These are not the property of the bank, but are borrowed in order to comply with the regulations requiring these securities as collateral for circulating notes or for government deposits.

Bills Payable and Rediscounts. In general, a bill payable is evidence of an unpaid debt which one owes to another. A bank, the same as a corporation, may borrow funds by giving its note, which then becomes a bill payable. On the basis of this instrument, a member

bank may receive an advance from the district Federal Reserve bank. This institution will also extend credit indirectly to a member bank by rediscounting certain classes of commercial paper of the latter's customers. Whereas formerly individual banks in the larger centers alone granted accommodation to other banks, since 1914 the Federal Reserve banks have rendered a similar service.

Letters of Credit and Acceptances Outstanding. This account is an offset to the asset, "customers' liability under letters of credit and on account of acceptances." When a bank issues a letter of credit, it agrees to accept the drafts of the seller of the goods. The bank thus assumes a liability to the amount specified in the letter of credit. Drafts accepted by the bank are its obligations and are known as acceptances.

IV. Analysis of Transactions.

In order to indicate clearly the way various transactions give rise to items in the statement, the business conducted in the first few days of a new bank will serve as a basis for analysis. To simplify the explanation of this subject, a record will be made only of those accounts in the statement which are affected by each transaction. A plus or minus sign will be used to indicate an increase or decrease in the amount of each item. Lastly, a completed statement showing the result of these changes will be presented.

In a small city, the X National Bank is organized under a charter which authorizes the issue of one thousand shares of capital stock with a par value of $100 each. In order to comply immediately with the national bank regulations requiring a bank to accumulate a surplus of at least 20 per cent before dividends can be paid, the shares are sold at a price of $120, thus

realizing the sum of $120,000. As a result, the initial statement reads as follows:

Assets		Liabilities	
Cash............	$120,000	Capital stock......	$100,000
		Surplus...........	20,000

The directors then buy a building for $20,000 and spend $5,000 for equipment, all of which they purchase with cash.

Assets	
Cash............	−$25,000
Banking house....	+ 20,000
Furniture and fixtures...........	+ 5,000

These two transactions affect the statement of the bank each in a different way. In the first case both asset and liability sheets of the ledger were increased by the same amount. The second transaction affected only the asset accounts, of which one was decreased and two others increased, so that the net total of the assets always remained the same.

In order to become a member of the Federal Reserve system the X National Bank must purchase stock in the district Reserve bank to an amount equaling 6 per cent of the former's capital and surplus. Up to the present member banks have been required to pay actually 3 per cent of this sum. The X Bank therefore buys Federal Reserve bank stock to the amount of $3,600 and pays for it in cash.

Assets	
Cash............	−$3,600
Federal Reserve stock...........	+ 3,600

The bank begins operations with a group of new depositors opening checking accounts and leaving $10,000 in cash. Thus the bank's assets in cash will be increased and the liability side of the ledger will show

a new item in the form of demand deposits. In this case the total assets and liabilities are correspondingly increased, while the two previous sets of transactions left them unchanged.

Assets		Liabilities	
Cash.............	+$10,000	Demand deposits...	+$10,000

One customer, with $1,000 for which he has no immediate use, leaves it with the bank, on the understanding that the bank may require thirty days' notice of withdrawal, and so a time instead of a demand deposit is created.

Assets		Liabilities	
Cash.............	+$1,000	Time deposits......	+$1,000

A number of other customers start new accounts by depositing $10,000 in checks drawn against their balances with other banks in the community. Assuming that these institutions are members of the local clearing house, the X Bank will secure payment of the checks on the following day. Meantime the amount of these instruments will be added to the accounts of the depositors.

Assets		Liabilities	
Exchanges for the clearing house....	+$10,000	Demand deposits...	+$10,000

Several customers seek demand loans from the bank and offer the stock of certain local corporations as security. This stock is held by the bank merely as collateral, and does not appear in the statement, as the asset which the bank holds is not the stock itself, but the note reflecting the sum due it from the borrowers. The bank agrees to lend $20,000 to its customers, who do not desire cash, but credit to their deposit accounts.

Assets		Liabilities	
Loans............	+$20,000	Demand deposits...	+$20,000

Thus it is seen that a bank's deposits may be increased in three ways: (1) cash left by customers, (2) checks and cash items drawn on other institutions, (3) loans granted by the bank itself.

The discounting of a note may have a similar effect upon a customer's balance. For example, a depositor who is a local manufacturer requests the bank to discount his own sixty-day note of $10,000 in order that he may buy raw material. The note is taken by the bank at the rate of 6 per cent. With the discount, the charge to the borrower is deducted in advance, and not, as in the case of a loan, at maturity. In this transaction the discount amounts to $100, and so the borrower receives not the full face amount of the note, but only the proceeds, $9,900. This sum is added to the amount of deposits, while the $100 is carried as discount collected but not earned. As the customer is indebted to the bank for the full amount of the note, it is so entered under the item of discounts.

Assets		Liabilities	
Discounts.........	+$10,000	Demand deposits...	+$9,900
		Discount collected but not earned...	+ 100

As the institution under consideration is a national bank, it is permitted to issue notes for circulation, provided it deposits with the Treasury of the United States at Washington an equal amount of government bonds and in addition contributes 5 per cent to the Redemption Fund maintained with the Treasurer. The directors first authorize the purchase of $20,000 worth of United States 2-per-cent bonds bearing the circulation privilege and, let us assume, selling at a par value of $100, for which cash is paid.

Assets	
Cash.............	−$20,000
United States bonds	+ 20,000

At the same time the bank sends to the Treasurer $400 as the required deposit of 5 per cent in the Redemption Fund.

Assets	
Cash.............	−$1,000
Redemption Fund..	+ 1,000

Having observed all regulations, the bank now issues its notes to the amount of $20,000. These instruments are placed in circulation by giving them to customers who have received credit from the bank. It can thus grant loans by increasing the deposit accounts of its customers or by giving them its circulating notes.

Assets		Liabilities	
Loans............	+$20,000	Circulating notes outstanding......	+$20,000

In addition to buying United States bonds, the bank invests its funds in a form of short-term government obligations issued since 1917, known as certificates of indebtedness. The bank buys $5,000 worth of these securities which, let us assume, have just been issued, and so no accrued interest need be paid.

Assets	
Cash.............	−$5,000
Certificates of indebtedness......	+ 5,000

With these securities as collateral the bank is able to obtain a fifteen-day loan of $3,000 from the Federal Reserve bank. This step is taken in order to establish the legal percentage of reserve which it is required to maintain against the deposits of its customers. This reserve is carried in the form of an account with the Federal Reserve bank. Thus the X Bank gives its note, which becomes a bill payable, and in return it receives credit to its reserve account with the Federal Reserve

bank. In analyzing this transaction, it must be remembered that as a matter of practical operation the X Bank would not receive a loan until it is a going institution and until an increase in its demand deposits necessitates this step.

Assets		Liabilities	
Lawful reserve.....	+$3,000	Bills payable.......	+$3,000

The same general relationship exists between the Federal Reserve bank and the X National Bank as between the latter institution and its own customers. As indicated above, they received credit from the X Bank through the granting of loans on their obligations secured by collateral, or through the discounting of notes received from their own customers. In the above transaction the Federal Reserve bank granted an advance to the X Bank on its note accompanied by certificates of indebtedness as collateral. In like manner, the X Bank may bring certain classes of notes which it has discounted to the Federal Reserve bank for rediscount. In a previous transaction the bank discounted a sixty-day note of $10,000 for a manufacturer. This obligation, accompanied by a satisfactory financial statement of the manufacturer, meets the required tests of eligibility, and so the Federal Reserve bank rediscounts it at the rate of 5 per cent for sixty days. It may extend this credit by adding the amount to the deposit of the X Bank. This institution feels that its balance is sufficient and therefore prefers to take out the proceeds of the rediscount in the form of Federal Reserve notes, which it can in time pay out as depositors make withdrawals.

Assets		Liabilities	
Cash............	+$9,916.66	Rediscounts.......	+$10,000
Interest paid......	+83.34		

It is quite necessary for a country bank to establish correspondent relations with an institution located in a

large money center, therefore the X Bank opens an account with a bank in New York City by giving it a cash deposit of $20,000.

Assets	
Cash.............	−$20,000
Due from other banks...........	+ 20,000

Various withdrawals are made by customers against their accounts. A check of $1,000 is drawn by one depositor in favor of another customer of the bank. This transaction involves merely the debiting of one balance and the crediting of another on the individual ledgers, but no change is made in the account of deposits on the general ledger of the bank, as its total deposits remain the same. A number of customers draw checks amounting in all to $15,000 in favor of depositors in banks at other points. These institutions send the checks to the X Bank, which creates a new liability account by crediting these other banks and at the same time deducting the amount from its depositor's accounts.

Liabilities	
Due to other banks.	+$15,000
Demand deposits...	− 15,000

A customer draws for an amount which exceeds his balance by $150. This overdraft is practically a forced loan, and so the same entries are made as if the bank had extended credit to the customer. His account is increased by $150, and as an offset the same amount is carried as an overdraft.

Assets		Liabilities	
Overdrafts.........	+$150	Demand deposits...	+$150

A customer requests the bank to certify his check for $500. His account is examined by the bookkeeper and shows a balance sufficient to cover the amount. In certifying a check the bank transfers the liability for

payment from the drawer to itself. Therefore the amount of the check is deducted from the depositor's balance and set aside in a special account for certified checks.

Liabilities	
Demand deposits...	−$500
Certified checks....	+500

The bank installs a vault at a cost of $2,000 and pays for it with a cashier's check.

Assets		Liabilities	
Furniture and fixtures...........	+$2,000	Cashier's checks....	+$2,000

At the request of a customer the bank issues a letter of credit amounting to $3,000. Although this liability is fully undertaken by the bank, at the same time it is covered by an equal obligation of the customer.

Assets		Liabilities	
Customers' liability under letters of credit...........	+$3,000	Letters of credit outstanding........	+$3,000

Assuming that these transactions have occurred consecutively in the course of several days' business, the completed statement of the bank will read as per table on page 181.

V. Classification of Assets and Liabilities.

The bank's assets and liabilities first were viewed as independent items and in the previous section they were considered in relation to one another. From this survey, it is evident that the accounts fall logically into several distinct classes which will be briefly analyzed. In general, assets may be divided on the basis of liquidity as follows: (1) cash in the bank, (2) amounts

due from banks, (3) loans and investments, (4) real property. Naturally cash is the most liquid resource, and a certain amount must be kept in the till as a means of immediate payment, and in the bank vault as a

Statement of the X National Bank

Assets		Liabilities	
Loans and discounts	$50,000.00	Capital	$100,000
Overdrafts	150.00	Surplus	20,000
Customers' liability under letters of credit and acceptances	3,000.00	Interest and discount collected but not earned	100
United States bonds and certificates of indebtedness	25,000.00	Circulation outstanding	20,000
Stock of Federal Reserve bank	3,600.00	Demand deposits	34,550
Banking house	20,000.00	Time deposits	1,000
Furniture and fixtures	7,000.00	Certified checks	500
Lawful reserve	3,000.00	Cashier's checks	2,000
Cash in vault	66,916.66	Bills payable with Federal Reserve bank	3,000
Due from other banks	20,000.00	Due to banks	15,000
Exchanges for clearing house	10,000.00	Bills rediscounted	10,000
Redemption Fund	400.00	Letters of credit outstanding	3,000
Interest paid	83.34		
	$ 209,150.00		$ 209,150.00

dormant reserve for emergency. But this money is idle, and an oversupply tends to reduce earnings.

The second group, due from banks, includes: (1) lawful reserves from Federal Reserve bank, (2) due from other banks, (3) exchanges for the clearing house, (4) checks on other banks in the same city, (5) items with the Federal Reserve bank in process of collection.

An account with the Federal Reserve bank can be drawn upon immediately and is thus the equivalent of cash. Similar availability is found in balances due from other banks. Exchanges on the clearing house and

checks on other banks in the same city are practically demand claims. Items in process of collection, of course, are payable only after a period of time which may take several days.

The third group of loans and investments will vary in liquidity, depending upon the maturity of the loans and the marketability of the investments. The bank's building, equipment, and ground are distinctly fixed assets.

The liability accounts may best be grouped according to the parties who have claims against the bank—namely, (1) stockholders, (2) depositors, (3) other banks, (4) general public.

The stockholders are really the owners of the capital, surplus, undivided profits, and unpaid dividends. The depositors may be individuals, banks, or governments, and they have claim to balances which may be payable on demand or on time. The bank is also debtor to outside institutions which have loaned on bills payable or rediscounts, and to persons who are holding its obligations in the form of circulating notes, cashiers' checks, certified checks, acceptances, and letters of credit.

VI. Analysis of a Bank Statement.

The statement of a bank reveals its condition on a certain date, and when several past statements are compared its record over a given period of time may be ascertained. The various items will gradually come to bear certain more or less definite relations to one another. Their relations will vary in considerable manner among banks, both according to the section in which they are located and the type of business which they handle, and for banks in general they will also vary in response to changes which take place in general business conditions. Banks, especially in the larger centers,

which regularly lend to other institutions, consider carefully the statement of condition which a prospective bank borrower furnishes before a loan is granted. They regularly analyze the statement and study the relations which certain of the items bear to one another. While these relations, as just indicated, are by no means absolute, certain general limits have become established.

In analyzing the bank's statement several tests are applied. On the one hand, the profitableness of the account of the institution is considered. This is supplemented by an analysis of the character of its assets, especially for the purpose of seeing if the bank is in a sufficiently liquid condition.

The profitableness of the prospective borrower is shown in several ways. The primary test is to consider the ratio which deposits bear to the capital investment, including in the latter term capital, surplus, and undivided profits. It is generally accepted that a bank which shows a ratio of less than five to one between deposits and capital investment is conducting too small a volume of business for the capital investment. On the other hand, a bank which shows a ratio of more than ten to one is conducting too large a business and should increase its capital, as the high ratio does not provide sufficient margin of safety in the event of the bank's failure. This test may be supplemented by observing the ratio which loans bear to deposits, to discover any tendency toward overlending. This test is less satisfactory because the ratio varies greatly according to monetary conditions, decreasing as stringency is noted. The third test lies in comparing the growth of surplus and undivided profits over a series of years as well as the dividend record of the institution.

In studying the character of the assets, attention is directed to the proportion of fixed assets, such as bank

building, real estate, furniture, and fixtures. The amount which a bank invests in its premises should be proportioned to the volume of its business and to its capital, while similarly it should not hold real estate other than that which is necessary to conduct its affairs. Other assets which may possibly become slow are also considered—for example, unlisted stocks and bonds. Of primary importance with respect to liquidity is of course the reserve position of the institution, and attention will always be given to the reserve ratio which the bank's statement shows.

Supplementing these two types of information, a lending bank considers the past record of the applicant with respect to borrowings. The lending institution is often furnished with a statement of the total borrowings of the applicant from other sources as well as from itself. This serves to indicate how the applicant has been conducting its affairs and also to show whether it has borrowed only for seasonal and extraordinary needs and has followed the usual practice of "cleaning up" its indebtedness to the banks each year. Another source of information will be the manner in which the borrowing bank has in the past conducted its accounts with the lending institution, especially whether it has made a practice of overdrawing against uncollected items or whether it has been conservatively and carefully managed.

CHAPTER XII

RATES OF INTEREST AND DISCOUNT

I. Adjustment of Cost in General Business.

Every business institution has to consider the rate of charge which it will be able to make for its service or product, and the establishment of such rates is often one of the most serious problems in business management. The retailer is constantly faced with the necessity of keeping his charges at such a level as will net him a profit above cost, while at the same time he avoids loss through excess of expense over income. The apportionment of different items of operating cost to the different charges for service or goods is a special phase of the general problem herein referred to and is itself highly technical. It always offers serious difficulties as an element in practical business policy.

In banking the same problems have to be met, and while they present some peculiar phases or elements of difficulty, they are in the main identical with the questions of the same description which are encountered in ordinary business. Still it is true that business enterprises are not all interested in this problem in precisely the same way. Contrast, for example, the case of a municipal street railway which has entered into a contract to carry passengers at a five-cent fare. The problem of profit for it is largely a problem of keeping down expenses, since the rate of its charge is practically stable. True, it may be possible, by proper

adaptation of service, to adjust its charges in an indirect way, as when special cars are run for long-distance traffic on an express basis, thus avoiding the cost of intermediate stops, while other cars are run for local traffic, but in the main the problem is very simple. At the other extreme of the problem of price adjustment is the case of a manufacturer who has to fix his charges on, say, one hundred different items or kinds of product, adapting his accounting so as to apportion overhead costs as well as individual costs to the several items. Intermediate is perhaps the problem of the railway which carries both passengers and freight and which perhaps divides its passenger traffic into two or three classes, while its freight is classified on a very complex schedule designed to adapt the rates to the different freight movements.

II. Influence of Competition in Determining Bank Charges.

The bank corresponds probably more nearly in its price-fixing problem to the public-service corporation than to any single type of industrial business. While within certain limits the bank can establish its own scale of charges, it cannot fix these in any one instance very differently from the rates which are established in the open market unless it wants to cut itself off from business. Banking is a highly competitive enterprise and is not ordinarily monopolistic in any sense of the term, so that the bank is always obliged to face the question of competition and of market rates. When the banker goes into business he has to recognize, therefore, that his rates must under ordinary conditions conform to those which prevail in the community at the time, and that he will not ordinarily be able to raise them very much merely because of his own costs

or expenses. Good management in banking (assuming that only sound paper is bought and that no losses are incurred) is thus a problem which involves two elements—that of costs and that of investment of funds in such a way as to get the best return from them. The former question, that of cost of operation, may be reserved for treatment elsewhere (see Chapter XIII). At this point it is desired to consider merely the question of charges for services, and, as has already been indicated, this question is in large measure a question of competitive conditions, since the banker must accept the situation prevailing in the community.

III. Rates on Loans and Discounts to Customers.

Several sources of income may be recognized at any bank. They may be classified roughly as follows:

1. Income from loans and discounts.
2. Profit from exchange or remittances.
3. Charges for collections.
4. Miscellaneous service charges.

Of these sources of income the one which is chiefly interesting to the banker is the first named, the receipts from loans and discounts. The income from these sources is ordinarily referred to as "interest" or "discount," the term "interest" referring to the amount paid by the makers of straight notes, the term "discount;" to the charge made for anticipating the maturity of the obligation which has been made for a named amount due on a specified date. It is clear, however, that the banker has always open to him the choice whether to confine his funds to lending or discounting the paper of customers who come direct to the bank, or of using it in what is called the open market—that is

to say, of buying or discounting paper left with him or made, by persons who are not his customers. The apportionment of funds between these two fields is oftentimes difficult, but, for reasons presently to be stated, every banker has to consider it with some care. Turning attention first of all to the rate to be charged upon loans and discounts made in business carried on direct with the customers of the bank, we may recognize that there is in every community what may be called a going rate of interest. This is the outcome of the supply of and demand for capital and corresponds to the community's judgment of what capital or "money" is worth at any given time. This rate may be high or low, according to prevailing business conditions. Thus, for instance, in some Oriental countries at the present time, the borrower does not feel that he is being badly treated if he is called upon to pay 2 per cent per month, or 24 per cent per annum, for a loan secured by real-estate mortgage. In some parts of the United States to-day the rate of 10 to 12 per cent per annum on such security is perhaps not too much, while elsewhere 5 or 6 per cent is normal. The variations in such charges, as has been said, depends upon the adjustment of supply of and demand for capital; but they are also influenced by the question of risk, being high where the experience shows that losses are large, and low where losses are small. So also in the case of loans on commodities or securities, rates vary much between different communities in accordance with the relative supply of and demand for capital in those different places, while in the several places themselves there is always a variation between types of loans which involve high risk and those which involve relatively small risk. Inasmuch as it is difficult to foresee the future, a fact which means that there is always a larger risk element in long-term obligations than in short-term obligations,

it is customary to regard long-term obligations as properly burdened with a higher rate than short-term. Accordingly, it may be said that the banker is confronted with a general level of interest rates which cannot be altered very much by him, but which depends upon comparison of demand for and supply of capital. On this level he finds a variety of uses in which his funds may be applied, and as between those he naturally asks a higher figure for advances which are long-term or risky or uncertain, while he is able to reduce his rate on those loans which are short-term, secured, and liquid. The variation in rates at any given time is in large measure determined by these considerations.

IV. Loans and Discounts in the Open Market.

But since at any given time there are different conditions in different communities, the banker has always open to him the option of shifting his funds from one community to another. He may transfer his funds to New York, let us say, and there lend them in the call market at a time when there is a great scarcity of funds in that market, thereby taking for himself a larger profit than he could get at home. Or, he may think it well to buy a certain amount of paper made by outsiders, thus keeping a part of his funds regularly in the general commercial-paper market. He may do this in the belief that such paper, although it actually yields less than the paper of his own customers, is desirable for him because it is rediscountable, or because it is more certain of payment at maturity, since no renewal is expected. There is always open, therefore, to the banker, the distribution of his funds between varying uses which yield different rates of interest, and his distribution of funds will be determined very largely by his own judgment as to the needs of his community, cou-

pled with a comparison of the earnings that can be made at home and those which can be made elsewhere. There is thus always to be recognized a long-term and a short-term rate in every community, while we may also recognize a customer's rate and an open-market rate. As between the latter there is no necessary relationship. One may be higher than the other, or lower, according to circumstances, although the competition and quality of the paper in the open market are such that the rate on paper of that kind is normally below the rate charged direct to the customer except in the case of the very primest names.

V. Legal Interest Rate.

At this point it may be noted that many states have what are called usury laws which specify that not more than a given rate of interest is to be charged for any loan or discount. Such laws are always difficult of enforcement, but they are peculiarly difficult of application in the case of the bank loan. If, for example, a banker lends $10,000 at 6 per cent, when the legal rate is 6 per cent, he presumably gets a gross income of $600. If, however, he lends $10,000 at 6 per cent and requires his customer to keep an untouched balance with him of $2,000, he is really making a net loan of $8,000. The customer gets the use of $8,000, and since he pays 6 per cent on $10,000, he is really giving the bank $600 for the use of $8,000, or about 7½ per cent. This way of adjusting rates of interest can hardly be reached by usury laws, while in various cases, where market rates are out of harmony with the legal rate, many bankers bring about an adjustment by other methods. Nevertheless, the legal rate is always a factor of some influence in the establishment of rates on borrowed money, and it may be

broadly stated that the general effect of it is unsatisfactory and increases the amount the actual borrower is obliged to pay for what he gets. This statement, of course, would hold true only when the market rate was above the legal rate, since, when the rate is naturally below the legal rate, the latter has little or no effect one way or the other.

VI. Call-money Rate.

In the large cities where securities speculation has taken deep root, it is usually possible for the bank to employ some of its funds in loans upon collateral security—that is to say, to allow borrowers to use its funds in carrying on speculative operations. Custom has made these loans generally subject to call—that is to say, has made them demand rates, with constant revision of the rate, thus establishing what is ordinarily termed the call market. This use of funds is quite outside the commercial-paper field, and, as in the case of other branches of business, the call rate depends upon the relative amount as compared with the demand for loans in that field. If at any given time the amount of funds offering in the call market is moderate as compared with demand, the rate will be high, and vice versa. High call rates are believed to draw into the market funds which would otherwise have been used in the purchase of commercial paper, and to some extent this is probably the case, but the call rate is in many respects noncompetitive, and there is ground for a question regarding the extent to which its influence is directly felt in diverting funds from other uses. Then, too, it should be remembered that the total amount of funds normally applied on call is much more limited than is usually supposed. It may be estimated that for the country as a whole the amount

of time and call loans is perhaps $1,000,000,000, in times of good average business, while the commercial-paper market perhaps requires about the same amount. Taking the loans and discounts of the banks as being, in round numbers, $36,000,000,000, it would appear that the call market ordinarily represents about one-thirty-sixth of the total loans of the banks, and the commercial-paper market (open market) another thirty-sixth. These fractions, while they seem small, are found to act at all times as an equalizer of rates. It is an important economic service of the call market that it tends to "even up" rates between other branches of business and as between different sections of the country.

In most large cities, and particularly in New York, funds are loaned to a considerable extent by money brokers, and there is a "money post" on the Stock Exchange at which call rates are fixed day by day. Bankers make rates direct to their own customers, and to a considerable extent arrangements are consummated between out-of-town and in-town bankers whereby the latter lend funds transmitted to them by the former on a basis of participation—that is to say, the total amount of funds in hand is loaned by the city bank, but with the understanding that a certain proportion is for the account of the out-of-town correspondent. Competition as between supply and demand fixes the rate on the Stock Exchange each day, but it often happens that the outside market furnished by the direct loans made by money brokers to their customers or by banks to their customers is below or above the official rate on the Stock Exchange. When these discrepancies occur it does not take long to reconcile them, since competition speedily sets in and the official quotations of the next day or two are usually brought into harmony with those of the outside market, or vice versa.

VII. Acceptance Rates.

The acceptance market is a special branch of the general discount market organization, and the rates that are charged by banks for accepting paper are fixed after exactly the same principles that apply in the case of other rates. In the case of the acceptance rate there is a rather more complex situation than that which exists in the case of direct loans and discount rates. A business man has asked a banker to accept for him at ninety days' sight. The banker, we will assume, charges one-quarter of one per cent commission. When the business man has obtained the acceptance, in this way, he has arranged a means of payment for his creditor, but it may be that he also wishes, or is obliged, to provide funds for his creditor in cash. This means that he must arrange for negotiating or discounting the bill. He must, therefore, find, or have some agent or banker find for him, a banking house which will discount the paper. Thus a discount is added to the acceptance commission. As bankers' acceptances are reckoned prime paper, certain of redemption at maturity, and in many cases eligible for rediscount at the Reserve banks, it is usually true that the acceptance commission plus the cost of discounting the acceptance is quite as low as the prevailing rate on commercial paper, and usually lower. At the present time in the New York market there is often a rough correspondence between the call rate and the acceptance rate, inasmuch as out-of-town banks which have money to spare are able to choose between putting such funds into call loans or into the purchase of acceptances. There is thus some tendency toward an evening up of rates. The general principles which control in each of these branches of the money market, however, are the same as those which obtain in others.

Adjustment of rates as between different sections of the market, such as straight commercial paper, bankers' acceptances, call loans, and the like, is very prompt, and while these rates are seldom identical with one another, the difference is due to the fact that what is traded in, in one section of the market, is not quite the same as what is traded in in the other. There is a difference in the degree of the liquidity or availability of the funds.

The popular supposition that as business declines "money" or "funds" are "released" from employment and soon become available for stock-market operations, thereby tending to reduce the money rate in the market, is erroneous. There was a modicum of truth in it so long as our currency was inelastic and so long as reserves could be built up by the redeposit of spare resources with city banks which promptly lent them to investors or speculators. None of these conditions now exists, but the only motive for the placing of funds in the stock market—apart from the mere desire to take care of a bank customer—is the wish to earn an income. Under present rates of discount about as much can be made by placing bank funds in acceptances eligible for rediscount with reserve banks as can be obtained in the stock market. Indeed, during the latter half of 1921 there was general correspondence between the rate on acceptances and the rate to be obtained by lending in the stock market. That there should be a general correspondence between these rates and the actual yield on thoroughly good investment securities is a natural outgrowth of the situation.

VIII. Central-bank Rate.

In countries where central banking exists there is a central-bank rate, or rediscount rate, which is different

from any of the various commercial rates just described and which has an influence upon the market in general that is of a quite special nature. In the United States the central-bank rate, or discount rate, is the rate fixed by the Reserve System. It differs from other rates in that it applies only to a certain very narrowly limited paper, while it is made only in favor of banks, inasmuch as the Reserve banks do not deal with individuals, but only with banking customers.

The question how the rediscount rate is fixed and what it represents is one as to which there is a very considerable difference of opinion. One view of the matter has been that the rediscount rate is a wholesaler's rate. This prevalent theory of interest rates regards the reserve or central bank as a wholesaler of credit, while member or "commercial" banks may be conceived of as retailers. The retail dealer gets his "funds" at, say, 7 per cent. He retails them to customers at a "profit" of, say, about 7 per cent, making his rate 7.49 per cent, or, roughly, 7½ per cent. This view of the case, of course, ignores that what the retailer borrows is not "funds," but a reserve credit which will sustain several times its own amount of "loans" at a commercial bank. Perception of this fact has led some hasty thinkers to suggest that under a central banking system an advance in the rate of rediscount would not affect the commercial rate at all or only in a negligible way, since it would have to be raised several per cent to produce any noticeable change in interest rates among actual loans to customers.

The fact in the case, of course, is that the analogy of wholesaler and retailer is thoroughly false as a reflection of the relation between reserve bank and commercial bank. No bank gets its entire loanable funds by rediscounting; many do not rediscount at all. The normal condition is perhaps that the average

bank carries a moderate rediscount line which is far less than its eligible loans and discounts. Accordingly, some have argued that while the average bank pays interest (rediscount rates) on only a part of its operations, these "marginal transactions" determine the cost of the whole to the customer, just as a manufacturer who finds he can get his materials at a rising cost establishes a uniform charge for the goods which, if possible, is based on the "cost of replacement"—the amount he must spend to get additional material at the rising price. The trouble with this theory is that it does not correspond to facts. Many a bank has carried its customers through a high-rate period without raising interest charges at all. New customers are often obliged to pay a rate based on the rediscount figure, although even they are not always so dealt with, especially where the lending bank was not obliged to replenish its reserves by rediscounting such customer's paper.

IX. Central-bank Rate and Credit Policy.

Rates cannot be studied to advantage without also studying the general problem of credit policy. Evidently, if rates were raised or lowered without any reference to credit policy, they would be a minor influence. If the Reserve Bank refused to rediscount, it would make no difference what rate was theoretically in effect. In prewar times, under British practice, the "rate" was the cost of getting a reserve credit which was limited only by the amount of available "eligible" paper that could be presented. During the war the rates then fixed implied a readiness to lend up to any amount on the kind of paper—chiefly government-obligations-collateraled notes—which constituted the staple of bank operations at that time. Since the war

there has been an attempt to reduce or "ration" credit, especially those forms of it that were uncertain of maturity or of self-liquidation, and which hence constituted a source of danger in respect to inflation. The real question to-day, in so far as the commercial rate for money is concerned, is whether there has been a relaxation of credit policy—a change in the attitude adopted with respect to rediscounting.

This outline of the general theory and practice of central, or Reserve, bank rates and their relation to commercial rates should, however, be regarded as merely the general statement of the case. In individual instances a member bank which at the time is "loaned up" and which in order to make any further loans to a customer is obliged to rediscount that customer's paper with the Reserve Bank, may say to such customer that it will not lend to him except at a rate fixed by the Federal Reserve Bank plus the banker's own indorsement commission. This, however, is the exceptional case. But, as stated, ordinarily no such direct connection between the reserve rates and those of the rank and file of the banks exists. The reserve rate is presumably fixed at such a figure as will result in maintaining a fair balance between the outstanding liabilities of the reserve, or central bank, and its cash assets. As the rate is lowered the central bank theoretically stands ready to rediscount or purchase any amount of eligible paper that may be offered to it. As the rate is advanced the amount of offerings of paper which would otherwise be presented is cut off because the profit is not large enough. Thus the central bank maintains a balance between the amount of overdue credit available and the cash on hand. This is the theory upon which the Bank of England has worked for many years, and before the war developed the well-known rule that the rediscount rate should

always be slightly ahead of the market rate That is to say, if funds were being loaned, say, at 6 per cent in ordinary bank transactions on a given kind of paper, the Bank of England rate would be perhaps 6½ per cent. The bank, however, always reserved the right to make, and did habitually make, a so-called private rate at which it dealt with customers as it saw fit, while it stood ready to take any amount of paper at the official rate. In the United States this plan has been varied and Reserve banks make only one rate on each kind of paper, while they have seldom or never stood ready to take unlimited amounts of such paper, but have kept to the privilege of refusing it or rejecting it on various grounds. The result has been that the market relationship between the rediscount rate and the commercial rate which existed in England before the war has not prevailed in the United States. War finance has established a condition which probably would have made a reproduction of the Bank of England policy in exact terms impossible. As it stands to-day, therefore, the Reserve Bank rate may be described as being simply the rate at which banks may count upon being able, up to a reasonable figure, to rediscount certain narrowly limited kinds of commercial paper with the Reserve Bank, while from the internal standpoint of the Reserve Bank the rediscount rate is looked upon as a rate which comes nearest to establishing a proper balance or relationship between outstanding liabilities and vault cash. It cannot be stated that there is no direct relationship between either market rates for commercial paper or call rates, on the one hand, and those of Reserve banks, on the other. Reserve banks, however, have established rates which vary considerably for the different classes of paper. In a general way they have pursued the principle of making the rates higher as paper grew

longer, higher as the nature of the loan was less liquid, and higher according as the paper was or was not thoroughly protected by indorsements. The rate has been made lower for shorter paper, lower for well-indorsed paper, and lower for highly liquid paper. Thus bankers' acceptances have usually been given the lowest going rate, while the highest rate has been paid for long-term agricultural loans of a maximum maturity of one hundred and eighty days. Commercial paper has paid the highest rate for ninety-day accommodation, and the lowest for shorter terms—sixty, thirty, or fifteen days. During the earlier years, after the organization of the Reserve system, the rate policy was highly complicated and resulted in the establishment of many rates, varying oftentimes by almost imperceptible amounts from one another. The coming on of the war and the establishment of special rates designed to facilitate the sale of public bonds tended to make this rate policy still more complex. Since the close of the war the practice has been considerably simplified, and the tendency to-day at most Reserve banks is in the direction of a limitation of the number of rates that are made and toward the classification of paper upon rather broad lines.

CHAPTER XIII

BANKING COSTS

I. Elements of Cost.

In the preceding chapter the sources of income which are ordinarily open to a bank have been outlined, and one of them—the rate of interest or discount—has been analyzed at some length. It is equally important to consider with care the various elements of cost which the bank is obliged to incur. Speaking generally, these elements of cost may be summarized as follows:

1. Fixed expenses—rent (or the interest on investment in building and equipment), insurance, surety bonds, taxes, light, heat, etc.
2. Bad debts.
3. Overhead expenses—salaries of president and general officers not assigned to any specific duty.
4. Operating salaries.
5. Stationery, printing, postage, etc.
6. Allowance for interest on capital.
7. Depreciation of equipment and building.

Most of these expenses are sufficiently obvious to require no description or explanation. The bank, of course, must have some definite quarters and it gets these either by hiring them from others or by purchasing or building them. In any case there is either an annual outlay or a capital sum on which interest must be allowed which represents the cost of the bank's quarters or offices. In the same way the fixed ex-

penses for lighting, heating, and caring for the offices of the bank must be provided for, and may be regarded as a fixed sum in a degree independent of the total amount of business the bank has to do and in a large measure independent of the amount of its capital.

The overhead expenses are in somewhat the same class as these fixed or plant expenses. Every bank has a certain number of salaried officers whose work when well done is of utmost importance to the institution, but whose pay cannot be assigned to any particular undertaking. They are "overhead" in the sense that they belong to or must be charged against everything beyond bank debts in due proportion—that is to say, they are salaries which are practically incident to the doing of any business and which have only a secondary relationship to the amount of such business. We shall presently see how the cost of such salaries is usually distributed among the different factors or divisions of the organization.

II. Operating Expenses.

When we come to the operating expenses of the bank, and to the cost of the capital involved, a very different situation exists. The larger part of the bank's expenses for regular operation is found in the salaries of its operating staff and in the allowance that has to be made for the amount of capital required to sustain such operations. In every bank, therefore, which attempts to keep track of its costs with any degree of care or to apportion such costs, there is an effort to segregate outlays by departments. Earlier in the present volume the internal organization of the bank has been described and it has there been pointed out that a number of independent departments can be recognized. Let us take, for example, the paying teller's

department. In that division there is a fairly distinct segregation of work, and it is possible to decide practically what salaries are assignable to the task of meeting the bank's obligations over the counter. This, of course, does not allow for the pro-rata share of the bookkeeping which grows out of the paying teller's duties, but that is comparatively easily assignable after a method which will presently be described. It is, therefore, entirely possible to segregate and analyze the cost of the paying teller's transactions and, if desired, to complete this cost by figuring in the cost of the bookkeeping that grows out of it. If desired, too, there can from this aggregate be computed the cost to the bank of paying each individual check or the cost of paying checks per $1,000.

III. Overhead Expenses.

Of course, all this has taken no account of the overhead expenses or the fixed expenses. There is naturally no definite or positive way of segregating and assigning them, and yet it is reasonable to make a distribution of fixed expenses on the basis of floor space occupied, or some similar principle, while it is equally possible to distribute overhead charges on the basis of total operating outlay or some plan of the same sort. When the distribution has been made in this way the result is to give a surcharge which, when added to the actual operating expenses of the department, represents a total theoretical department outlay which may then be assigned to, or divided among, the different operations carried on in the department. Thus, for example, suppose that the pro-rata share of fixed and overhead expenses chargeable to the paying teller's department in a specified bank is $10,000, while the salaries of that department may be figured at, say, $90,000. Here the

total expenses of the department would be considered as $100,000. A like method of computation may be followed throughout the whole of the institution. For example, suppose that the institution is divided into some five or six different groups, or sections, or departments, the sum total of the charge to the department for fixed and overhead expenses when added gives the aggregate outlay for overhead and fixed items, while as divided as among the different branches of work it represents the individual addition to their operating cost. It is now possible to get at least an approximate notion of the total expense involved in paying checks, or in receiving deposits, or in collecting items, and this may be assigned on the basis of number of operations performed—thus getting an approximate estimate of the cost of collecting a check, paying a check, receiving a deposit, clearing a check, etc. It is clear that the problem involved in this kind of apportionment or computation is a simple form of cost analysis or cost accounting, which merely involves the apportionment or assignment of elements of outlay to the purposes or operations which give rise to them.

IV. Determination of Cost per Unit.

Thus far the analysis is comparatively an easy one even if the results obtained are not much more than approximate. Now, however, it is necessary to recognize that there is nothing fixed about bank expense or bank cost in so far as refers to individual transactions. This is because the volume of operations handled determines the cost per unit up to the point where it is necessary to add further elements of cost. For instance, suppose that a given staff of men in the paying teller's department can pay five thousand checks a day. Suppose, however, that the bank's

clientele is not of a kind which habitually presents many checks for cashing; so that, as a matter of fact, not more than five hundred to a thousand are daily presented for payment. Inasmuch as the bank must maintain a complete and well-organized staff in that department, it would seem that the expense of handling each one of these checks is anywhere from five to ten times as great as if the staff were working at capacity. In the same way, imagine the case of an institution which is equipped and able to handle collections running into a given number of thousand items daily—say, ten thousand items. Clearly, if its depositors only bring it five thousand items daily the proportionate expense of the collection department is, relatively speaking, very high. This peculiarity of banking is the same that is to be noted in the case of public-service corporations. Suppose a street-car line is obliged to run a car over a given route at least once in five minutes. Experience shows that a car run once in ten minutes will be comfortably filled, but a more frequent operation of cars does not result in a corresponding increase of passengers, so that each car is not more than half full. Here the more frequent service is simply so much added expense. Economy in operating the bank is likewise found in adapting the size of the staff to the average volume of its items in each department—first ascertaining from experience about what customers will require, then enlarging or contracting the staff in each branch to correspond thereto. Even when this has been done, however, the variation in costs will be a very great one. Suppose, for example, that a large bank, whose customers seldom present checks for cashing, has a small staff of men in the paying teller's department. Suppose, further, that this small staff has its time fully occupied even with the limited number of checks which come through. Con-

trast with this bank the case of another in which a very large volume of payments is daily made and a correspondingly large staff employed. The chances are that the cost of paying a check in the bank with the large volume of payments will be very much less than in the other. This makes it difficult to hit upon any standard scale of banking costs proportionate to operation.

V. Reserve as an Item of Cost.

Even allowing for difficulties inherent in fluctuations in volume of banking operations, however, the problem of ascertaining costs per unit of business done might not be considered very complex by the cost accountant—at least in theory. There are other elements, however, in the bank's business which present considerably more difficult problems. The most important of these is probably that which centers around the question of reserves. As we have seen in an earlier portion of this volume, every bank is obliged, either by custom or law, or by both, to maintain a certain reserve. For the sake of ease in figuring, we may assume that this reserve is 20 per cent of its outstanding liabilities. Now, when A brings to the bank a deposit in coin amounting to $1,000, the bank establishes in his favor a credit on its books of $1,000, while it places in its cash reserve the $1,000 in coin. It is evident that if the bank must keep a reserve of 20 per cent behind its outstanding deposits, $200 of the coin which is thus received must be maintained permanently on hand in its vault to protect the outstanding credit of $1,000. This means that it has $800 of free cash. It may theoretically lend this $800 to borrowers. Suppose, for the sake of argument, that it does so, how does the position of the bank then stand? It owes A $1,000, while it has

lent $800 to B at, say, 6 per cent. If it pays no interest to A it is now the gainer by the transaction by 6 per cent on $800, or at a rate of $48 per annum. From this must be deducted the expense, whatever it may be, which has been found by experience to represent the cost of carrying a deposit account and of paying checks which are customarily drawn upon it. There must also be taken off the expenses involved in making the loan to B, which include an investigation of his credit and a variety of other items, to say nothing of the overhead and fixed-expense charge applicable to all transactions of the bank. After these have been deducted from the $48, a net profit presumably remains. The bank, however, does not do business in this way customarily, but it holds the $800 in its vaults as a reserve. Customers do not habitually borrow in cash, and if they did the bank would soon refuse to do business with them. If the $800 be regarded as a 20-per-cent reserve, it is evident that the bank might credit on its books liabilities equal to five times that amount—that is to say, it could undertake to credit to depositors the sum of $4,000 and yet be in a safe position, because it would have on hand in its vaults the 20-per-cent protection referred to. The basic income upon which interest would have to be figured would not be 6 per cent on $800, but on $4,000, or $240. Deductions as before would have to be made from this profit, covering the loans that had been made in order to get it, and covering also the other items of expense connected with it.

How safe would the bank be in this position? It would have outstanding $5,000 in deposit accounts, or deposit credits, and would have in its vaults $1,000 in coin. The question of its safety would depend largely upon the question whether it was receiving checks from depositors about as fast as it was paying

checks drawn on deposit liabilities which it had thus credited. In other words, it could not regard itself as doing a safe business at all unless there was a steady flow of funds into the bank which fully offset the flow of funds out of it. Of course a certain percentage—perhaps a large percentage—of the checks drawn on the $5,000 of deposit accounts would be drawn in favor of persons who would redeposit them in the bank itself, in which case the expense would be simply the maintenance of the bookkeeping department. A good many, however, would be drawn in favor of other banks, and would have to be cashed. If their cashing resulted in loss of specie the bank would soon find itself back at the position in which it could maintain outstanding only an amount of loans equal to the amount of specie—the original $800. But on condition that it keeps expanding its business and gets in as many checks as it pays, it can keep outstanding a volume of loans represented by deposits on which it receives interest. This amount, as we have seen, is conditional upon its keeping up an active, live business with a steady movement of items into and out of the bank.

By this time it is clear that the assignment of costs to each particular unit of cash that comes into the hands of the bank is very difficult. Thus, for instance, in the illustration that we have given we assume that the original depositor paid in $1,000 and received a credit on the bank's books without interest. This cash was then used as a reserve and loans were made thereon, giving rise to deposit liabilities, while finally we saw that the maintenance of these deposits was conditional upon the bank's doing an active collection business. To trace the expense of all of these transactions back to the original deposit of $1,000 in coin, and so to estimate what that deposit was worth to the

bank, is practically out of the question. As a result most banks which do anything in the way of cost accounting simply endeavor to ascertain the expense involved in performing certain representative bank transactions, such as paying checks, collecting checks, etc., and they then seek to estimate the worth of any given account to them upon an expense basis. They usually make no distinction of the form in which deposits are made—whether in coin, claims on other banks, or checks on the bank itself. It is enough for them that a credit has been established on their books, and their effort then is to find out about what the current cost of carrying on such a deposit account is. Nevertheless, it is true that underlying every loan that gives rise to a deposit is the item of reserve carried against it. We have seen that in the case of the illustration already given this reserve was 20 per cent. On every outstanding deposit made by the bank, therefore, it would be proper to figure the "tying up" of 20 per cent of the amount of the deposit. For instance, if A borrows from the bank $1,000 at 6 per cent per annum, and if the bank habitually gets a flow of checks which offsets the checks drawn by A, it might be assumed that the profit of the bank was the interest at 6 per cent on $1,000, or $60, minus the expense involved in keeping open a deposit of that amount, minus such assignment of overhead charges as the bank might determine to make. This amount would be only a part of the truth. It would still be true that the bank was obliged to figure upon having to put $200 out of its power to use that sum, since it is obliged to hold that as a reserve. While it does not cost anything directly to employ its capital in this way, the indirect cost is the interest on $200 at the going rate. Every transaction on the part of the bank, then, which involves the creation of a liability involves also the creation of a reserve and

results in a corresponding reduction of the bank's available funds, properly giving rise, therefore, to the corresponding element of charge against income.

This may be a very varying charge. The bank may not find it necessary to keep its whole reserve in coin. Under the central banking system it may be able to keep its reserve with some other bank, which results in cutting down the total amount of reserve required, or it may be disposed to invest its reserve partly in very quick paper. Under the old national banking system a large part of the reserves of American banks was carried on interest with city banks. Conditions of these kinds may result in reducing the unit reserve cost of conducting the institution. The result is still further to complicate the cost analysis of the bank's operations and to make it difficult in any given case to ascertain the exact cost of a given transaction.

VI. Methods of Limiting Cost of Accounts.

Nevertheless, there are some principles which stand out so clearly in this kind of cost analysis as to make it possible to limit costs quite definitely. For instance, assuming that every loan is made only after a careful credit analysis of the concern which applies for it, it is clear that very much the same amount of investigation must be made in order to lend with entire safety \$10,000 to a concern that would have to be made if the loan were \$25,000. In the same way it evidently costs about as much for a bank to pay a check of \$100 as it does to pay a check of \$1. The banker can, therefore, to some extent limit himself by prescribing the size of the transactions which he will undertake. He may make what amounts to a fixed rule that no loans shall be made under ordinary circumstances below a given amount, or that he does not expect his cus-

tomers to draw checks below a certain amount. More important still, he may inform his customers that they must keep on deposit with him a minimum balance in an amount whose interest is estimated to about carry the cost of their business transactions. In all of these ways he may seek to cut down an excessive volume of transactions and thereby to reduce the expenses connected with them, especially in those cases where the volume of business is in very small units and represents a kind of transaction that is unproductive or unremunerative. Having fixed these broad general limitations upon his business, the banker can, thereafter, guard himself only by careful and constant analysis of each account in order to make sure whether it is profitable or not. In so doing he ascertains the amount of the various kinds of work which he has to do in keeping the account going—the number of checks paid and the various other items of accommodation asked for by the customer. Particularly does he seek to assure himself that the account is a live one—that is to say, that it consists of funds which are actually in hand and not funds that are merely in process of being collected or likely to come in at some time in the future. If the account is merely a nominal sum composed of collection items against which the customer is constantly drawing, the banker may be safe enough, but he is simply supplying his customer with money. In such a case the banker's protection is merely that of requiring his customer not to draw against any balance that has not been actually collected.

VII. External Items of Cost.

The principal items of expense outside of the bank which must be figured upon are exchange or collection charges to other banks and interest paid to other banks

and to depositors. If the banker is obliged to rediscount—that is to say, to borrow from other institutions—the cost of such operations must, of course, also be reckoned in. But supposing that the banker is self-dependent, the two items already named are the principal ones for which he must provide. In looking over the profitableness of an account, therefore, he first ascertains the internal cost of carrying it along, and then, so far as practicable, assigns his external costs to the accounts which give rise to them. This gives him a fair working notion of the advantage or disadvantage involved in the particular class of business, or in the particular customer's trade. He is then able to apply such corrective measures in those cases where loss is being incurred as he may think fit. Unfortunately, it is a fact that in a large number of smaller and medium-sized institutions cost analysis of the kind briefly outlined in this chapter is not very carefully undertaken. Many banks tend to work by a sort of "rule-of-thumb" method, and to make up on one item of business what they lose on another, being satisfied to take the general run of things as it goes and "average up."

VIII. Significance of Cost Analysis.

Remembering that bankers find it difficult to fix rates of interest, these being established largely on a competitive basis, the importance of carefully watching the cost in the bank is evident. The banker's income is fairly well established, and while he can increase it in some particulars through excellent management and by taking advantage of varying rates of interest in varying communities, his principal avenue of success is found in increasing his volume of business. This, however, is beneficial only if he keeps his costs

down. Banking profit is thus essentially a problem of cost analysis.

All this is of interest to the banker, but its interest to the business man who is a customer of the bank may not be so clear. The business man, however, finds that the banker's regulations and requirements result in throwing upon him various items of cost which he had not reckoned upon. For instance, if the banker insists that he shall draw only against collected funds, the business man is practically obliged to require of his customers payment in a certain kind of exchange, or else to reconcile himself to the loss of interest on the funds, or, in order to offset this increase, his price is raised correspondingly for his goods. He thus soon learns to bring himself into harmony with the requirements of good banking in order to reduce his own costs.

CHAPTER XIV

PUBLIC REGULATION OF BANKING

I. Government Control of Banking.

The subject of government supervision was given some consideration in Chapter V, which studied the bank as a type of business organization. It was there noted that banks are subject to practically all the legal restrictions applying to other corporations, and besides must comply with a number of special regulations. These additional limitations are justified by the singular nature of the banking business. Banks in a way are quasi-public enterprises, for through their ability to extend or withhold credit they influence the progress of all other industries. A bank differs from an ordinary business in that it is not a single unit whose success or failure is of little concern to other banks, but, on the contrary, its welfare vitally affects all of them, since each institution is an integral part in the credit structure which to a certain extent becomes impaired by even one failure. For this reason, because of the public nature of their business, bankers themselves have realized the need of government supervision. Government supervision is particularly essential in the United States. In this country, very few banks have been permitted to establish branches, and concentration into a small group of financial institutions has been restrained. Instead, encouragement has been given to the development of small independent banks, and their total number is now over 30,000. Supervision is

more readily obtained in a system of a few consolidated institutions than among a mass of many banks operating under varying conditions throughout the country.

Government supervision aims to protect stockholders, noteholders, and depositors of banks by seeing that these institutions observe the principles of solvency and liquidity. In general, the solvency of any business depends upon the adequacy of resources in meeting liabilities. When the obligations exceed the assets of the corporation, the situation may be met by drawing upon the capital investments, but this impairment brings loss to the stockholders. The maintenance of solvency is thus a problem which confronts every business enterprise. In addition, a bank carries the responsibility of continually retaining its assets in a state of liquidity. At all times it must be able to pay the demand claims of its creditors, whether depositors or noteholders. A bank may be in a solvent condition, but, nevertheless, its assets may not be sufficiently liquid to satisfy the immediate demands of its creditors. If the bank can tide over this temporary embarrassment, its assets may have sufficient permanent value in the end to prevent dissolution. The solvency and liquidity of banks are thus determined by different factors. The former is shown largely by the proportion of the capital investment to general liabilities, while the latter is based upon the ratio of a reserve of liquid assets to demand obligations. In regulating banks the government can develop their solvency by exacting an adequate contribution of capital and surplus, and their liquidity by insisting upon the maintenance of a sufficient reserve. The government also requires that assets in general be satisfactory in character and that loans in particular be sound.

To attain these ends, national and state governments have established administrative bodies and have

enacted legislative regulations. The federal regulations are well codified in the National Bank and Federal Reserve acts, but there is little uniformity in the banking legislation of the various states. A striking comparison is found between the banking laws of New York, which contain 280 pages, and the statutes of a state like Arizona, which include but 12 pages. The national and state regulations cover the following subjects: (1) procedure for establishing a new bank, (2) requirements of capital and surplus, (3) restrictions on granting of loans, (4) security for circulating notes (national only), (5) report of financial condition, (6) examination of banks, (7) maintenance of reserves against deposits, (8) liquidation of insolvent banks, (9) procedure in the event of failure to meet the requirements of the law.

The procedure for establishing a new bank and capital requirements have been already discussed in Chapter V, restrictions on loans have been considered in Chapter VIII, and a discussion of others will be deferred until later. Some of the remaining subjects will now be treated in so far as they relate to commercial banks. Government regulation of noncommercial institutions will be considered in Part III.

II. Supervision of Banks.

During the Civil War, Congress passed the National Bank Act, which provided for the organization and operation of banks under federal law. The Act created the office of Comptroller of the Currency. This title is really a misnomer, for the function of this officer is not so much the regulation of currency issues as the supervision of banking operations. His monetary duties are confined merely to routine matters relating to the issuing and redemption of notes circulated by

national and Federal Reserve banks, while, on the other hand, he exercises extensive control over banks, for he possesses the sole right to authorize their organization, and even to close them if conditions warrant such action. He requires them to submit periodic reports concerning their financial condition, and he conducts examinations of their resources and liabilities.

The states also exercise supervision over banks organized under local laws. A few exert control over banks through boards composed of several state officials, and the function of examination is delegated to the same department which investigates other financial institutions, such as insurance companies. It is more customary to confer the supervision upon a single officer known as commissioner or superintendent, and to conduct a separate department concerned exclusively with the supervision of banks located within the state.

III. Reports.

In the United States, government regulation of business enterprises is rendered more effective by providing for some form of publicity. The data thus presented enables the public to pass its own judgment on the operations of the business under consideration. Accordingly, national and state banks are required to submit several kinds of reports, the most important of which is the general statement, which presents a summary of the bank's condition on a particular day. In former years, the supervising officials called for these reports on stated dates throughout the year. Some banks were thus able to arrange affairs so that their statements would present an excellent showing on the day when reports had to be submitted. To prevent this "window dressing" the Comptroller now sets a

time unknown beforehand to bank officers by calling for a statement of condition on a day which has already elapsed. For example, on July 3d the Comptroller might notify all national banks to state the amount of their assets and liabilities on June 26th. These reports must be attested by an officer and certain directors of the bank and submitted within five days after the call has been issued. The National Bank Act requires the filing of at least five reports throughout the year.

Similar reports are also required by the state governments of state banks and trust companies. There is close co-operation in this matter in some states, and a number of state superintendents fix the call for reports on the same day as that set by the federal Comptroller. With national and state institutions thus reporting on the same day, it is possible to make a more uniform study of financial conditions throughout the country. A summary of the statement must be published by each bank in the local press in order to assure publicity.

In addition to the statement of general condition, national banks are called upon to file two special reports. Twice a year they must submit data concerning the amount of dividends which have been declared and the net earnings in excess of these dividends. If a national bank exercises the right of issuing notes, a report must be also made on the amount of these obligations in circulation on January 1st and July 1st of each year. On certain occasions the Comptroller of the Currency has requested the banks to submit reports on special subjects.

IV. Government Examinations.

Bank reports alone would be insufficient to safeguard the interests of stockholders and creditors, for these

statements are compiled by the banks themselves and are not verified by any outside agency. Moreover, mere figures fail to present a true insight into the condition of the reporting banks. To verify these statements and to investigate the actual status of the banks, several kinds of examinations are conducted. They may be external or internal, depending upon whether they are beyond or within the control of the bank. External examinations are public or quasi-public in nature, since they are made by the national and state governments and also by the clearing houses. Internal or private examinations are conducted by the directors or the stockholders of the bank.

The object of any form of examination is to determine the solvency and liquidity of the institution. In general, these factors are ascertained by an analysis of the bank's assets in relation to its liabilities. In examining assets, their actual existence must be proved and their true appraisal determined. An examiner must assure himself that the assets as stated in the general ledger are really in the possession of the bank and that it has complete legal title to them. He must also compare the book values of all assets with their true market worth on the day of the examination in order to discover any depreciation. An examination conducted by the government must also disclose whether the bank has observed the laws relating to capital requirements, reserve computations, and loan restrictions.

To attain these ends, the federal government maintains a staff of examiners under the direction of the Comptroller. The examination division was reformed after 1907, when the panic emphasized the need of more efficient supervision, and it was further reorganized after 1914, when the Federal Reserve Act revised the banking system of the country. The main office is located in Washington, and twelve branches correspond-

ing to the Federal Reserve districts are also in operation. Each branch is supervised by a chief, who directs the work of the field examiners, and the operation of the entire service is unified by frequent conferences of the staff. Examiners are required to pass a sort of civil-service test to determine their knowledge of accounting, banking, and general business. The law forbids an examiner to derive any direct or even indirect compensation from banking institutions. He is no longer compensated by a fee from the bank which he is examining, but is now paid a fixed salary by the government.

The cost of an examination is carried by each bank in proportion to the amount of its resources on the day of the investigation. This plan is more equitable than to impose the same assessment on all banks, for such division would prove burdensome to the smaller institutions. The law requires at least two regular examinations every year, and in addition the Comptroller may order special investigations more frequently in the case of banks indicating an unsatisfactory condition. The duration of an examination may extend from several hours to several weeks, depending upon the size of the bank. A small bank can be examined within a day by a single official, while a large institution requires the services of several examiners and their assistants for a period of two or more weeks.

The primary object of the examiner is to verify the actual existence of the assets and liabilities as compared with the entries in the books of the bank. The examiner starts his investigation by counting the cash, for this item can be tampered with most readily in covering a defalcation. Money in the hands of the various tellers is verified first, and later the sums in the vaults, for they can be closed in the meantime with the examiners' seals to prevent any possible tampering with cash, securities, or other valuables. The counting

of cash is not difficult, as the legal reserve funds are now maintained with the Federal Reserve bank, and the individual bank keeps relatively small sums in its own vaults. Even this money is not examined completely, for packages containing small denominations are checked merely in bulk, and only bills of large amounts are counted individually. Coin may be tested by weight in bags or, if necessary, by actual count.

Checks and other items which are to be forwarded for collection and payment may be verified by communicating with the banks on which these instruments are drawn. In the case of checks payable through the local clearing house, verification can be accomplished merely by inserting in the batch of checks on each bank a slip requesting that the total amount be verified to the examiner. In the same way the item "due from other banks" is reconciled by requesting from each of these correspondents a statement of the amount due to the bank on the day it is being examined.

Similarly the amount of loans and discounts may be ascertained by selecting a number of borrowers at random, sending them a statement of their obligations and asking for a confirmation of the amount.

It is highly important to know what persons are receiving loans from the bank. Are directors granting such accommodations to themselves? Are the officers securing credit from the bank? Is any one individual or corporation obtaining loans in excess of the limits prescribed by law? Large extensions of credit, although not excessive legally, are noted by the examiner on special sheets which indicate the direct liability of any borrower as the maker of notes, and show his contingent obligation as the indorser of some other person's paper. These liability records are filed in the office of the government examination department. At the next examination of the bank, similar data are

secured, and if these relatively heavy lines of credit show no reduction, the facts are brought to the attention of the officers and directors, who are then called upon to remedy the situation.

The examiner also inspects the collateral which borrowers have pledged with the bank. This security should possess a satisfactory margin or excess value over the amount of each loan. Also the collateral should be readily marketable, so that the bank may recover the amount of its loans if the borrower should default in his payment. Advances based on real-estate mortgages especially are observed, as such collateral possesses only a limited market. An examiner also notes the maturity of the bank's paper and analyzes obligations which have been continually renewed or are long overdue. These he lists as slow, doubtful, or estimated losses.

In examining bonds and securities held by the bank as investments, their book value is compared with market quotations, and any discrepancy due to appreciation or depreciation is noted in the report. An appraisal is also made of fixed assets, such as the bank building, furniture, fixtures, and real estate.

The underlying problem in examining assets is to discover any tendency toward overvaluation. In scrutinizing liabilities of a bank the examiner must be watchful for any inclination to understate the extent of these obligations. A bank, as any other corporation, is exposed to the possible evil of an overissue of stock. An attempt to sell more shares than are authorized by the charter can easily be discovered by comparing the amount issued, canceled, and still outstanding, as entered in the stock-certificate book of the bank or in the records of the registrar of the stock.

Any misstatement of the liabilities due depositors can be ascertained by communicating with them di-

rectly. The amount due to banks as depositors is verified by the same method used in checking the amount due from other banks—*i.e.*, by asking for a statement of these balances. This means cannot be applied very well to the accounts of individual depositors, who might receive the impression that the solvency of the bank was being questioned. So instead, the examiner may test the accounts as entered in the individual ledger by comparing them with any pass books which depositors have left with the bank for balancing.

Having checked all assets and liabilities, the examiner enters these accounts in his report of condition. Later this report is compared with the statement submitted by the bank itself, and if discrepancies arise they must be adjusted. The bank may be required to charge off losses on its loans or depreciation in its investments. These deductions may be large enough to impair the bank's capital, and in this event the stockholders may be called upon to make good the impairment.

After an examination of a bank has been completed, the results should be communicated to the directors to give them an opportunity of correcting any irregularities discovered in the operation of the institution. For this reason the Comptroller of the Currency furnishes the board of directors with a copy of the report filed by the examiners. In some states these findings are brought to the attention of the directors immediately by giving the examiner power to call a meeting of the board.

Officials of the state governments conduct examinations of banks in about the same manner as the federal examiners. The accuracy and thoroughness of these investigations have varied according to the economic development of the state. A dual system of bank examinations by both national and state governments

existed when the Federal Reserve Act was passed. This statute provides for a third form of banking examination, as the Federal Reserve banks can examine any of their members and submit a report of their findings to the board. Under such conditions, state banks joining the Federal Reserve system faced the possibility of undergoing two sets of government examinations, and thus many were at first deterred from accepting membership. This disability has to a large extent been removed, for the Federal Reserve Board may accept the reports of the state banking departments in lieu of its own examinations. This policy has been followed in states which conduct efficient examinations, while in a few Federal Reserve districts it has been found necessary to conduct independent investigations of the member banks incorporated under the laws of some states. Assuming that the examination of the bank has disclosed irregular practices, the national Comptroller or the State Superintendent has certain means in their power of remedying the situation. Warnings can be issued to the delinquent bank, but its doors can be closed only when it commits certain acts which are legally regarded as indicating a state of insolvency.

V. Clearing-house Examinations.

The work of the government in examining banks is sometimes supplemented by the co-operation of the clearing houses. Since the members of these associations are daily receiving obligations due from one another, they all have a common interest in knowing the true condition of their associates. This thought was deeply impressed upon Chicago banks in 1906 when several local institutions failed, and a consequent panic was averted only through the efforts of the other members of the clearing house in sustaining the losses

themselves. Subsequent investigations showed that the failures were the result of irregular practices which had escaped the notice of government examiners. To prevent a recurrence of this condition the Chicago Clearing House Association introduced its own system of examining member banks. Similar action was taken by the clearing houses of other large cities throughout the country, and in sections where no clearing-house associations are organized, banks of several cities have combined into a group system for retaining jointly the services of examiners to analyze the condition of members.

The expenses incurred in undertaking these examinations are defrayed in various ways. The method of the Comptroller may be followed by levying an assessment upon each member bank in proportion to its total resources. This charge may also be prorated according to the total clearings of each bank throughout the year. A third plan is to impose the same fee upon all banks irrespective of the amount of their resources or clearings.

An examination by a clearing house is thus independent of those undertaken by the government, and also by the individual banks. The investigation may be conducted by the clearing-house manager himself or he may delegate this task to a special examiner, and in a large city this service may be performed by a firm of accountants. These examinations are directed by a special committee of the clearing house. Acting on orders of this body, the examiner may enter any bank without giving it previous notice. He analyzes its condition and presents his findings in two separate reports. A complete statement is forwarded to the directors of the bank under examination. If its condition is satisfactory a brief report is submitted to the clearing-house committee, but this body is given a detailed

survey of the bank's status if in any way it endangers the interests of the other members. The plan of clearing-house examination has been criticized on the ground that it may disclose to competitors of the bank confidential information regarding its credits and loans. On the other hand, the system of clearing-house examination is free from some of the restrictions which limit the work of government agencies. In the first place, the examiner, acting in behalf of the clearing house, does not confine his analysis merely to violations of the law, but may also take into consideration practices which may be legal, but nevertheless dangerous to the welfare of the banking community. Nor is the clearing-house association compelled to wait until the bank is driven into insolvency, but instead this status may be averted by the prompt application of remedial measures.

VI. Internal Examinations.

In addition to these external examinations conducted by the government and by the clearing house, an internal investigation of the bank's condition is also made by the board of directors. As a rule this function is delegated to a committee, which thus acquires an intimate knowledge of the bank's operations.

VII. Bank Audits.

Another form of internal analysis is the bank audit, which differs from an examination, especially in purpose. It has been shown that the examination of a bank seeks to verify the existence and value of assets and liabilities at a fixed date as compared with the corresponding entries in the bank's ledgers. The audit proceeds a step farther in checking the records them-

selves. Besides, an audit is made not alone to determine the accuracy of the accounts, but also to test the efficiency of the methods used in keeping these records. Audits should result in the installation of systems which possess a minimum of error and a maximum of economy. The records of the bank may be audited by a firm of public accountants employed by the board of directors. Audits may also be made by members of the bank's staff. In a small bank this task quite naturally devolves upon the cashier, but another way is to rotate the clerks from one department to another so that they will verify records which they do not handle in the course of their daily work. A large bank maintains an auditing department, in order that the more important transactions can be placed under constant observation.

According to the frequency with which audits are made, they may be classed as either periodic or continuous. The former are made only at various intervals throughout the year, especially in the case of a small bank, while a continuous audit is essential in departments of a large bank handling the shipment of cash and securities.

VIII. Reserve Requirements.

The most important obligation which a bank assumes is the necessity of meeting its current liabilities, whether deposits or circulating notes. It is therefore essential for the bank to keep its general assets in liquid condition, and particularly to maintain a portion of its resources available at all times to meet these demand obligations. These special assets are known as the reserve. The nature of this reserve and the policies which a bank may follow in order to restore any depletion have been discussed in Chapter X; and an explanation of the redemption of bank notes will be deferred

until Chapter XXIII. For the present, consideration will be given only to the methods by which public regulation seeks to enforce the upkeep of adequate reserves against deposit liabilities.

To attain this end the government insists that banks observe certain reserve requirements which are expressed as a percentage ratio between the amount of the bank's cash and available credit and the total of its deposits. How large a reserve will be needed to meet these liabilities depends to a considerable degree on the locality of the bank. If it is situated in a large money center where business men are continually drawing checks against their balances, obviously a higher ratio of reserves against deposits is necessary than in the case of a bank in a smaller city where accounts are less active.

The National Bank Act, therefore, divided the United States into three groups: (1) central reserve, (2) reserve, (3) nonreserve, or country districts. The first group includes New York City, Chicago, and St. Louis; the second covers about one hundred of the larger cities; and the third, the remainder of the country. Location was the only distinction which the National Bank Act drew in fixing the amount of the reserves. The Federal Reserve Act continued the above classification, but further graded these requirements by permitting banks to carry a lower reserve against time than against demand deposits. The division between these two classes of deposits has been arbitrarily set at thirty days, and all accounts which can be withdrawn within this period are regarded as demand deposits, while time deposits include those payable after thirty days.

Certificates of deposits, savings accounts payable after thirty days' notice, and postal savings are regarded as time deposits under the Federal Reserve Act.

As soon as a certificate of deposit attains a maturity of less than thirty days, or as soon as the holder of a savings account has notified the bank of his intention to withdraw his balance, these items then become demand deposits.

Based on the principle of the location of banks and the maturity of deposits, the Federal Reserve Act as amended in 1917 fixes the reserve requirements of member banks as indicated in the following table:

Classes of Banks	Demand Deposits	Time Deposits
	Per Cent	Per Cent
Central reserve city banks..........	13	3
Reserve city banks.................	10	3
Nonreserve city, or country, banks...	7	3

Against demand deposits, banks in the central reserve cities must maintain a reserve of 13 per cent; in reserve cities, 10 per cent; and in the remainder of the country, 7 per cent. No such distinction is drawn in computing the reserve against time deposits, of which only 3 per cent need be maintained by all banks, irrespective of their location.

The Federal Reserve Act effected two important changes in the system of reserves established by the National Bank Act. In the first place, the percentages of reserve requirements were considerably reduced. The National Bank Act permitted banks to carry a certain part of their reserves with other institutions, but the Federal Reserve Act as later amended compelled the transfer of all reserves to the Federal Reserve banks. All members of the Federal Reserve system, whether national or state institutions, must comply with the reserve requirements stated in the above table.

IX. Computation of Reserves.

For the purpose of computing these amounts the Federal Reserve Board has prepared a form to be followed by all member banks in reckoning reserves. In order to illustrate the method of calculation, the form as filled out by a member bank is presented below:

Net Demand Deposits:			
1. Deposits payable within thirty days, not including (a) U. S. Government deposits (b) Certified checks outstanding (c) Cashier's checks outstanding....................			$190,434
2. Balance due to banks other than Federal Reserve banks..	$111,028		
3. Cashier's checks outstanding.	14,425		
4. Certified checks outstanding..	14,199		
Total.............		$139,652	
Less:			
Deductions of the following items are permitted only from the total of items 2, 3, and 4. Should the total of items 5, 6, 7, and 8 exceed the total of items 2, 3, and 4, both groups must be omitted from the calculation.			
5. Balances due from banks other than Federal Reserve banks..	$9,675		
6. Items with Federal Reserve bank in process of collection..	4,369		
7. Exchanges for clearing house.	50,573		
8. Checks on other banks in the same place.................	875		
Total deduction (items 5, 6, 7, and 8)..................		65,492	
9. Net balance due to banks....			74,160
10. Total net demand deposits (items 1 and 9).............			$264,594

TIME DEPOSITS:	
11. Savings accounts (subject to not less than thirty days' notice before payment)........	$3,542
12. Certificates of deposit (subject to not less than thirty days' notice before payment)	2,050
13. Other deposits payable only after thirty days............	737
14. Postal savings deposits......	3,381
15. Total time deposits (items 11, 12, 13, and 14).............	$9,710

In the above statement a separate computation is made for demand and for time deposits. As the Federal Reserve Act does not require the keeping of reserves against government deposits, only the balances of individuals and of banks are considered. The Federal Reserve Act does not insist upon the maintenance of reserves against gross bank deposits, but merely upon the net difference between the amount due to other banks and the amount due from them. Thus for reserve purposes, net demand deposits include only accounts due to individuals and net balances due to banks.

Item 1 represents individual demand deposits. This sum does not include United States government deposits, for these require no legal reserves. Checks which have been certified by the bank or drawn by its cashier are carried as separate entries, and items 2, 3, 4 together constitute the total sums due to other banks. These three accounts represent the gross liabilities due to other banks, and from the sum a deduction of the assets due from other banks must be allowed. These accounts arise either from balances carried with correspondents or from items being collected by the Federal Reserve Bank, the clearing house, or the bank's messengers. These amounts are indicated

by items 5, 6, 7, and 8, which together represent the amount due from other banks. The difference between the total of items 2, 3, and 4, the amount due to other banks, and the total of items 5, 6, 7, and 8, the aggregate due from other banks, is indicated by item 9, which is the net balance due to other banks.

A bank does not always owe to other banks an amount larger than that of their indebtedness to it, and at times the sum of interbank credits more than offsets the total debits. From this situation the bank derives no advantage, for under the Federal Reserve plan when the total due from banks exceeds the amount due to banks, both groups of items must be entirely omitted from the calculation of reserves. In this case the bank carries a reserve only against item 1, its individual deposits. If there is a net balance due to other banks as shown in item 9, it is added to item 1, and these two accounts together form the total net demand deposits.

Less difficulty is encountered in calculating time deposits, which include the following items: (11) Savings accounts, (12) certificates of deposit, (13) other deposits payable only after thirty days, and (14) postal savings deposits. As mentioned above, a time deposit is any account which is payable only after a notice of thirty days.

In the illustration under consideration the net demand deposits amount to $264,594, and time deposits to $9,710. Assuming that this bank is located in the nonreserve class, it is required to hold as reserve 7 per cent of its demand deposits and 3 per cent of its time deposits. Its reserve against demand deposits will thus amount to $18,521.58, against time deposits, $291.30, and these two sums together $18,812.88. Although reserves must be computed every day, the bank's required amount is counted not as a daily, but as an

average, monthly balance, and a deficit on one day may be offset by a surplus at another time.

X. Liquidation of Banks.

Notwithstanding the above regulations of the government, banks at times become insolvent. It is interesting to note the principal causes of failures among national banks since the inauguration of the national banking system, as indicated in the report of the Comptroller of the Currency for 1920 (Vol. I, p. 183).

	Number of Banks		Percentage of Failures
1. Involving criminal action....	....	228	38.4
Defalcation of officers......	51		
Fradulent management.....	128		
Wrecked by cashier........	46		
Wrecked by defalcation of bookkeeper	1		
Wrecked by asst. cashier....	2		
2. Involving unlawful acts......	....	114	19.2
Excessive loans to officers...	62		
Excessive loans to others ...	52		
3. Depreciation of assets.......	....	83	14.0
Securities.................	19		
Real estate...............	14		
General stringency.........	50		
4. Failure of large debtors......	....	12	2.0
5. Injudicious banking.........	....	139	23.4
6. Closed by run or in anticipation	....	9	1.5
7. No record of cause..........	....	9	1.5
Total....................		594	100.0

The public supervisors of banks have only limited power in closing banks which are headed for insolvency. The federal Comptroller or the State Superintendent can take action against a bank only if it commits a

clear violation of the law. If a bank arbitrarily exceeds the powers authorized by its charter, if it continually fails to maintain its reserve, or when it willfully impairs its capital, such offenses may lead to its ultimate dissolution. For these contingencies the national and state laws have given their supervisory officials powers of varying scope. In some states the Superintendent of Banks must apply to the courts for the appointment of a receiver. Until the application is granted valuable time may be lost and the condition of the offending bank may become increasingly unsatisfactory. In other states, laws empower the Superintendent to take immediate possession of the bank's affairs. This official then requests a court to nominate a receiver, who takes charge of the assets and liabilities of the bank. The National Bank Act not only permits the Comptroller of the Currency to assume immediate charge over the affairs of the bank, but also allows him to appoint the receiver.

CHAPTER XV

INTERBANK RELATIONS

What has thus far been said about banking deals chiefly with relations between the bank and the individual or between the bank and the public. It must be remembered, however, that in most countries there are many banks. In some, where branch banking is followed, these banks are not independent of one another in the sense of having a different corporate existence, but they are different offices of the same institution. In others, however, they are separately organized and are in other respects independent banks. In the United States we have about 30,000 independently organized banks, each with its own charter. Of these banks about 8,000 have been chartered by the federal government, while others have been chartered by the state governments. In foreign countries the number of independent banks is usually very much smaller, but these banks are authorized to establish branches. Thus in Canada at the present time, for example, the number of banks is 17, but the various banks are authorized to establish branch offices. It is probable that in Canada there is an even larger number of bank offices open to the public than in the United States in proportion to population, the total number of branches there being 4,676. Exactly how many independent banks or branch-bank offices there should be in a country depends upon circumstances. There is no definite rule in the matter. Conditions of transportation

and volume of business available in various communities determine the number of offices thus to be established.

Whether the banks are independently organized or are simply different offices of the same general organization, it still remains true that they must have various relationships with one another. Not all persons do business with the same bank, and consequently every bank obtains claims upon other banks or has to pay claims held by others. Thus it becomes essential to develop a definite system of dealings between banks. These dealings may be classified in a general way as collection and remittance, deposit, and rediscount. There are other functions which are performed by banks for other banks, but they are of the same general description that may be performed by any business house for another. Those that have just been mentioned are distinctly banking functions, and as such they require a particular kind of banking organization in order that they may be successfully carried on.

I. Interbank Relationships.

1. Collection.

The simplest type of interbank relationship is that of collection. Bank A receives from a depositor a check on bank B. It credits this check to the depositor—that is to say, it undertakes to pay him the face of the check on demand. This necessitates action on its own part for the purpose of collecting the check from the bank on which it is drawn. It might send the check to the other bank and ask for cash, the messenger turning in the check over the counter, getting the money, and bringing it back with him. Sometimes this plan is still employed, but it is a primitive and unsatisfactory way of doing business. The second method is

that of accumulating checks on other banks and eventually offsetting them against checks accumulated in the same way by other banks against it. This is called "clearing." A third method of disposing of the check is that of depositing it with some other bank—perhaps the one on which it is drawn—which thereupon gives credit for it. In this case the bank receiving the check is said to be a depository and the two banks are termed correspondents.

2. Clearing.

The most familiar type of relationship between banks is that of clearing, and for purposes of convenience it is customary that banks should be united in what is called a clearing house. A clearing house is usually an unincorporated local association of banks formed for the purpose of conducting interbank relationships. There are clearing houses in all of the principal financial centers of the world, and in the United States there are upward of 200 such organizations. Some of them are very small and their business is conducted upon an extremely simple and elementary basis. Others are highly organized and have their own buildings and elaborate organization. Some have in years past undertaken the task of examining their members and of reporting to a clearing-house committee whenever bad financial practices showed themselves. Still others have in various ways performed mutual service for the banking community. In all, however, the central function of the clearing house has been that of offsetting claims against one another. The technic of clearing has been fully treated in many authoritative works on the subject. Only the underlying thought or idea of the process will be referred to here. Suppose the existence of only two banks which have constituted themselves a clearing house. Bank A has in the course

of its business received checks drawn on bank B in the amount of $10,000. Bank B has received a like amount in checks drawn upon A. Of course, in receiving these checks each bank has credited them to the depositors. A's books therefore show a liability of $10,000 to depositors, while on the asset side it has accumulated an item called "exchanges for clearing house," which consists of the total of checks on other banks thus deposited. A like situation exists in bank B. Representatives of the two banks now meet and each hands the other the bundle of checks drawn upon it. Bank A has thus eliminated its "exchanges for clearing house" from its assets. In return it has received a bundle of checks drawn upon it by its own depositors. It now charges these checks to the account of the depositors who originally drew them. The same step is taken by bank B. Now the situation is the same as it would have been if the checks had in the first place been directly deposited in the banks upon which they were drawn. The effect of the clearing has been nothing more than to offset the claims against one another. There is evidently no source of income in this process, and, on the other hand, no loss. The clearing house probably requires the use of an office or room and perhaps a little clerical assistance, so that it involves some expense which may be divided *pro rata* between the two banks. At all events, the clearance has resulted in avoiding payments of coin, and has in effect extended the bookkeeping process of each bank so as to include the checks which are not directly deposited with it. It is thus a labor-saving device and also a great economizer of money.

If a third bank, C, now enters the clearing group, the process becomes somewhat more complicated. A presents bundles of checks to B and C, B to A and C, and C to B and A. It is always possible that there

will be what is called a perfect clearance—that is to say, that the total amount which each bank has against the other two is equal to the aggregate which they present to it. This, however, is a rather unlikely contingency. The chances are that some one of the three banks will either owe the others or be a creditor of the others, and this remains true even as the number of banks included is enlarged. Now if A owes C, let us say, $500, while B owes a like amount to A, and C owes $500 to B, it is evident that each member owes $500 and is due $500. The payments may thus be allowed to cancel. If, on the other hand, the debts are not exactly equal in amount the clearing house may direct A to settle with C, while B is released from paying A, and A is released from paying C. In this way the number of payments to be made can be reduced. Another way of meeting the same situation is that of requiring each bank to keep a certain balance with the clearing house. Then debtor banks draw checks in favor of the clearing house, while creditor banks are paid by it. The result is to settle the whole series of transactions with a minimum of actual payments.

Another complicating element may come into the situation if the clearing house permits its members to present checks drawn upon banks which are not represented in the clearing house but which have requested certain members to clear for them. In such cases the different members may be merely representatives of a string of banks whose transactions pass through them, and are cleared on its books. Again the question may arise whether such clearances for nonmembers are made in behalf of banks which are situated in the same city or outside of it. There is no reason why a member of the New York clearing house should not undertake to clear the checks of a bank located in San Francisco if it wishes to do so, and the question whether it could

afford to do such work, and if so at what charge, would then have to be settled between the New York clearing member and the San Francisco bank. Ordinarily, however, the checks for out-of-town banks which are brought to the clearing house by members are segregated and are put through a separate division of the organization, which is known as the country clearing house. Of this more will be said at a later point. It is enough to remark here that, in general, clearings in the proper sense of the term are made on an instantaneous basis—that is to say, they represent items which are immediately cashable.

As has already been noted, banks instead of clearing their items might simply deposit them with the other banks on which they are drawn, leaving them on deposit there. This, in fact, is the way in which many checks are disposed of when they are deposited with banks which are located elsewhere than the institutions on which they are drawn. For example, bank A in New York City may have received, say, $10,000 of checks drawn upon banks in various small towns in California. At the end of the day's work these checks are carefully sorted and massed together with others. The bank will then send the whole $10,000 to a correspondent in San Francisco. This San Francisco bank will give bank A a credit for the $10,000, and it will then proceed to collect the checks. Perhaps it may send some of them direct to the banks on which they were drawn. For example, suppose that one of the checks was for $500, and was drawn on a Fresno bank. The San Francisco bank may transmit it to the Fresno institution, or perhaps to another bank in Fresno, for credit. Or it may happen that the Fresno bank has an account with the San Francisco bank, in which case the San Francisco bank, having been previously authorized to do so, charges the $500 off against the Fresno

bank's account on its books. In this case it has simply given credit to the New York bank for $500 and reduced the Fresno bank's credit by $500. Suppose now that in the course of its regular business the San Francisco bank receives a check drawn on bank A in New York City, which originally sent it the $10,000 for deposit. It may charge this $500 check off against the credit on its own books in favor of bank A, thereupon remitting the check as a paid item to the New York bank. Or it may be that in all these cases the bank on which the check is drawn has stipulated that it wants to see and approve the signatures on checks before they are paid, and in that case they may simply be sent to it, and when found to be correct the transmitting bank will be directed to mark them off against the account. This process is usually referred to as collection, as distinct from clearing. The difference between the two is that, whereas clearing is an instantaneous process in which only balances are settled, collection is a continuous process in which the proceeds of items are remitted. It may easily be that in collection not a single cent of money is ever passed. Bank A, for example, may in the course of a year send $1,000,000, at one time or another, in checks to bank B and get credit for them, while bank B may in the course of the same time send a like amount to A, the two accounts "washing out" at the end of the period and neither bank owing the other anything. In such cases the payments are sometimes said to have been "cleared on the books," but the process is not clearing because it has involved time. It is a process of collection and settlement by means of credit.

3. General Services

For various reasons banks find it desirable to carry balances with other banks. The primary reason for

such balances is that of keeping themselves in position to furnish their customers with exchange. X, for instance, who is a customer of bank B in San Francisco, may find it necessary from time to time to pay his debts in New York funds, which means that he occasionally wants a check which is payable in New York. He obtains this by asking his bank to draw in his favor or in favor of a designated concern upon the balance which it is carrying with the New York bank. This makes it desirable for the country bank to have a sufficient balance in New York—and of course at other points in case it has to draw upon them. When such relations exist between banks one is said to be the correspondent of the other, and such correspondents frequently undertake various duties. These duties may be of a more or less elaborate character or they may be comparatively few in number. The country correspondent of a city bank usually does nothing for that bank except to collect funds, remit them, and possibly carry a balance in its favor. The city correspondent for a country bank does the same kind of work, but is ordinarily called upon to carry a larger balance and to allow interest upon it. From time to time it may be allowed to invest this balance or a part thereof, passing upon the securities or notes that are taken and thus morally guaranteeing their goodness. Conversely, it may be asked to convert such securities or notes into cash through repurchase or rediscount. It may also be asked to open foreign credits on behalf of the country bank and to transact various other kinds of business. The city bank usually supplies its correspondent information from its credit files, and the latter may be occasionally requested by the city bank to supply information regarding some individual or concern in its own immediate neighborhood as to which the city bank wishes to be informed.

II. Interbank Organization.

While considering the general question of interbank relationships, it is desirable to refer briefly to the idea of bank federation or of interbank organization. What has been said thus far has reference to a condition of affairs in which interbank relationships have developed simply as the outcome of voluntary action on the part of different institutions and is the outgrowth of business necessity or convenience. A good example of such relationships is afforded by the national banking system prior to 1913. Under the old provisions of the National Bank Act, banks might act as correspondents for one another practically as they chose, while the law provided for a permissive system of "reserve agencies," which meant that banks in certain places were allowed to hold balances for banks at other points and to count them as reserves in the legal sense of the term. In other cases, however, it has been found desirable to establish a more or less compulsory system of interbank relationship. This may be the outgrowth of commercial custom, which, if anything, is stronger than law, or it may be the outgrowth of actual legislation. Of the two systems the British banking system perhaps furnishes the best example in the former case, while the Federal Reserve system is the best example in the latter. The working of the Federal Reserve system is fully discussed elsewhere, but at this point it is well to note that the outstanding feature of the system is the establishment of legally required interbank relationships whereby all banks maintain a deposit credit with a co-operatively owned institution known as a Federal Reserve bank. The purpose of this system is to insure the advantages which come from close interbank relationships, and to regulate or control such relationships upon a definite plan under

which all have equal access to the co-operative institutions. The use of the co-operative mechanism is left entirely to the discretion of the members, who may collect through it or discount with it, as they see fit. The system simply enables them to do these things when their necessities require or their convenience dictates. There is nothing in the law to prevent them from establishing other interbank relationships at present, and as a matter of fact most of them maintain such relationships.

It should be noted also that the problem of interbank relationships is rather different in those countries where branch banking exists from what it is in those where banks are not allowed to establish branches. Experience shows the desirability of a great number of banking offices. This is partly a matter of convenience. The easier the access to the bank, the more promptly will checks and drafts be deposited and the less danger will there be of the hoarding of coin. It is also, however, a matter of easy extension of credit. Credit is best studied at close range, and not only for this, but for many other reasons, it is admitted that the tendency of banking offices is to increase in number. Thus in the United States we have to-day about 30,000 banking offices of all kinds, with perhaps 110,000,000 of people. In Canada, with possibly 10,000,000 people, there are only 17 banks, but the number of branches existing there brings the total of offices up to probably 4500 to 5000. Where the banking system is organized with a few head offices and a system of branches depending upon each, interbank relationships become less important, and in place of them the relationship between the parent bank and its offices assumes broader significance. There is still, of course, question of the relations to be maintained between the several head offices and, to an extent, between the branch offices located at a given

point, but the real problem of interbank relationship is not found there, but is found in the control exercised by the parent over its offshoots. First of all is the question how funds shall be apportioned to the different branch offices as a basis for loans. Problems of exchange of course present themselves just as they do between independent banks in different parts of the country. The regulation of the seasonal flow of funds back and forth between districts presents a special question for determination. Such questions are adjusted through competition where independent interbank relationships are the basis of the banking structure, while under a system like that of the Federal Reserve they may thus be said to be adjusted upon a basis of competition subject to supervisory control by the co-operative organization. Under a pure independent branch system, like that which exists in Canada, the problem of the head office with respect to the matters already mentioned is a very broad one, since it involves not merely the question of passing upon the individual loans and credits, but also that of determining the distribution of accommodation between different parts of the country. It is because of the prevailing belief that such problems are likely to be selfishly dealt with that there has grown up, particularly in the United States, a prejudice against the branch banking system. This prejudice has been strengthened by the contention that small banks are likely to be subject to unfair competition as a result of the efforts of large competitors operating through branches established at points where there is not sufficient business to maintain more than one institution.

III. Technic of Local Clearing.

Having thus reviewed the theory of clearing and the relations between correspondent banks, it may be

worth while to sketch briefly the technic of clearing as developed in the United States to-day. It has been noted in an earlier part of the chapter that there exist in the United States large numbers of clearing houses situated at various points. These clearing houses have no relation with one another, but they are independent units. In a general way they are organized as non-incorporated associations, and their function consists of offsetting checks and drafts against one another, arranging for mutual examination and generally exercising a common supervision over the member banks of the organization. The technic of clearing is comparatively simple and has been outlined in its application to the city department by Mr. Jerome Thralls, formerly secretary of the Clearing House Section of the American Bankers' Association, as follows:

Each member maintains in its office a department known as its clearing-house department, and to which are charged by the several departments all items drawn on or payable at the offices of the other members. These items are usually recorded in the department where they originate and on reaching the clearing-house department are inspected as to signature, dates, etc., and are indorsed with a rubber stamp, showing the name and clearing-house number of the clearing bank and the date of clearing. They are next sorted—all items drawn on or payable at the office of each member being placed in a separate pile. When the sorting is completed and the clearing hour approaches, each pile of checks is taken to an adding machine and a list thereof is made and a total is taken. The items are then done up into packages, the list covering each package being placed on its face, and the clearing-house numbers of the members on which the items are to be cleared are marked on the respective packages with pen or pencil. The lists on the packages are indorsed with the regular clearing-house indorsement stamp. The packages are then sealed or bound up with rubber bands.

Each member is supplied by the clearing house with statement blanks which are in duplicate form and which show at the top the name and number of the member using the same. The blanks used in different places are not uniform. . . .

Along the left margin of each statement appear, in regular order, the names and numbers of all the members. Immediately to the right of these names and numbers are several columns, the two principal ones of which are headed "On Clearing House" and "From Clearing House." The total shown on each package of items is entered in the column "On Clearing House" and directly opposite the name and number of the bank on which the items are to be cleared. When all totals have been entered, the statement is footed, and if the work has been correctly done the footings thus obtained will prove against the combined total of all charges made by the several departments to the clearing-house department. Assuming they do so prove, the packages are placed in a satchel or chest and the clearing-house clerk and messenger take the satchel or chest and statement and make a mad rush to the clearing house. The reason for this rush is that the clearing hour is fixed, and any member not represented on the dot is fined; and if tardy over a certain number of minutes the member is shut out of the clearing for the day.

The exchange room at the clearing house is equipped with a cage or desk for each member, and a manager's desk. The cages are usually arranged in parallel rows and in numerical order with reference to the numbers of the members. On arrival at the clearing house the clerks enter their respective cages and the messengers pass around and deposit their packages of items—package No. 1 being deposited in cage No. 1, package No. 2 in cage No. 2, and so on down the line. When all clerks and messengers have arrived at the clearing house and all deposits have been made, each clerk has on his desk a package of items from each member, and he enters on his statement in the column headed "From Clearing House" and opposite the respective names and numbers of the members the amount shown on the package received from each. The packages when thus entered are dropped into a receptacle, from which they are taken by the messengers, who rush back to the banks so that the items may be quickly distributed to the bookkeepers, who pass upon the genuineness of signatures, etc., all items being cleared subject to being returned at a certain hour if found not good for any reason. Each clerk foots his statement when all totals have been entered, and if he finds he brought a greater volume to the clearing house than he received from the members he carries his "From Clearing House" footings to his "On Clearing House" column and makes his deductions, showing the amount due his bank from the clearing house, or his credit balance, as it is termed. Should the amount received at the clearing house exceed the amount

brought to the clearing house, the operation would be the reverse, and he would show the amount due the clearing house, or his debit balance. A duplicate of each statement is passed to the manager, who enters on the clearing-house records the net debit and credit balances and the "On Clearing House" and "From Clearing House" totals. He then foots the balances and if they prove the clerks are dismissed and return to their respective banks. The statements are filed as a record of the transactions between the several members, and the manager foots the "On" and "From" Clearing House columns; and if they agree it is conclusive evidence that the work has been correctly done. The "On Clearing House" column represents the items brought to the clearing house and are the figures that are reported in the newspapers and financial journals as the bank clearings. Where an average of $10,000,000 worth of items are cleared daily the resulting balances run about $600,000; so by the operation the amount of cash necessary to handle $10,000,000 worth of business is reduced from $10,000,000 to $600,000.

The next step is the settlement of balances. One plan is for the manager to draw checks against the debtor members in favor of the creditor members; the first check being drawn against the largest debtor, in favor of the smallest creditor, the second in favor of the second small creditor, and so on down the line until all the creditors have been satisfied. These manager's checks are payable in cash and generally must be settled at or before 2 o'clock P.M. of the day on which drawn. In case of failure to collect any such check at or before the specified hour, all members other than the one against whom the check is drawn are released from responsibility thereon. To simplify the payment of these checks a clearing-house gold depository is usually maintained, in which members deposit gold of required weight and United States gold certificates, in lieu of which are issued clearing-house gold certificates in amounts of five and ten thousand dollars. These certificates pass current among the members, the holders thereof being the owners of the gold and United States gold certificates so deposited and which count as legal reserve. In settling balances of $600,000 it is necessary to use only sixty ten-thousand-dollar gold certificates. This plan saves abrasion on the gold as well as the labor of carrying it back and forth and recounting it. It also eliminates the danger of street robberies.

The manner of settling clearing-house balances, and the forms used, vary slightly. In some cities the debtor banks pay the cash to the manager of the clearing house, and he in turn pays it to the creditor banks; while in other cities the creditor banks present the clearing-

house manager's settlement checks to the debtor banks direct for payment. In some cities, in order to avoid congestion of work and to head off check kiting, informal exchanges are made by the members. Receipts are taken to cover items so exchanged and are passed through the clearing house at the next regular exchange. Trading of balances is also in vogue in some cities, and since the inauguration of the Federal Reserve system many balances are settled by checks on Federal Reserve banks. To encourage promptness, care and accuracy on the part of clerks, fines are imposed for errors in lists, wrong clearings, missing indorsements, errors in statements, misconduct, etc. These fines range from ten cents to five dollars, and are assessed against banks whose representatives are the offenders. The proceeds usually go toward defraying the general expenses of the association. To get an idea of the convenience and saving that result from the daily exchanges at the clearing house one need only to consider the number of clerks that would be required to go from bank to bank and collect and handle the actual cash represented by $10,000,000 worth of items, then compare that process with the clearing of a like amount of items and the settlement of balances resulting therefrom.

In addition to the function of city clearings there is, as has already been noted, in quite a number of clearing houses to-day, a country department whose function is essentially that of collection. In principle the work of the country department differs from that of the city chiefly in the fact that deferred rather than immediate debit and credit is given.

IV. Technic of National Clearing.

It is now necessary to take another step in depicting the clearing-house system of the United States. As explained elsewhere in this volume, every national bank and all of the more important state banks and trust companies are now members of the Federal Reserve system, and as such each bank maintains a specified balance on the books of the Federal Reserve bank in the district in which it is situated. In order to re-establish such a balance it may send in checks or

drafts upon other banks which have agreed not to make any charge to the Federal Reserve bank for collection. These checks or drafts are credited to the account of the member bank so sending them, but only after enough time has been given to transmit them to the banks upon which they are drawn and to receive back funds as the proceeds of the item thus assumed. The member bank is supplied with a schedule showing how soon it will have credit for the items drawn on the different points, and it can thus keep very close track of the balance with the Reserve bank from day to day. It is then able to draw upon any accumulation it may have in excess of required reserve, and thus to furnish remittances to its customers. Such checks drawn upon a Reserve bank are of course acceptable remittances anywhere.

It will be noted, however, that a Reserve bank which thus accepts checks and drafts indiscriminately from its customers will probably get a good many such items drawn on banks in its own district and a good many drawn on banks outside of its district. Those drawn on banks within its own district it can largely clear upon its own books by mere bookkeeping entries, or through a local clearing house of which it is a member. Those drawn on banks in other districts it can clear by sending them to the banks in the other districts for remittances of similar kind, or by putting them through the Reserve bank of any other districts and leaving it then to make the collection. This latter process is facilitated by what is called the gold-settlement fund at Washington, which is a fund in gold deposited with the Treasury Department by each Federal Reserve bank. Daily transfers through this fund are made by telegraph, each Reserve bank wiring the amount of its debits and credits and these being then offset on the books at Washington, so that the relative owner-

ship of the fund varies from day to day, but without the necessity of actually shipping gold at all. Thus the transfers of the country are effected by simply an easy bookkeeping process which practically clears between clearing houses. It is still true that a good many checks go through the local clearing house and are collected by it either directly through city members or, through its country department, from out-of-town banks, but an increasing volume of checks have gone through the Reserve banks and by them have been cleared on their own books or through the gold-settlement fund. The technic of clearing, as already explained, is simple and may be summed up in the statement that it is nothing more than a bookkeeping process in which plus and minus items are canceled and the balance is paid in some form.

V. International Relationships Among Banks.

What has been said thus far relates primarily to correspondent relationships between banks situated in the same country. The international relationship of banks which act as correspondents for one another is very similar, but is necessarily more complex and involves more responsibilities. In such international relationships, the most important functions to be performed are those of mutually acting as agents for one another in the opening of credits, thus facilitating the movement of goods from country to country, while the proceeds of collection will be carried on open account, or remitted, according as circumstances dictate. These are what are technically known as foreign-exchange transactions, and are more fully dealt with elsewhere. It is worth while to mention them at this point because they are illustrative of interbank relationships in the largest sense, and because they are precisely on a

parity with domestic interbank relationships. The difference lies in the fact that in international trade there is more call for the actual advancing of funds, while differences in currency units and values involve a greater degree of responsibility in holding such funds. But it should be borne in mind that what is called "foreign exchange" as conducted at the present time is a special phase of interbank business, in which a bank in one country acts as collecting agent for a bank in another, and frequently adds to this function that of rediscounting or purchasing paper or assuming the responsibility for credit at the request of its correspondent bank.

CHAPTER XVI

FOREIGN EXCHANGE

I. Meaning of Foreign Exchange.

The subject of exchange, whether domestic or foreign, may be studied as a phase of economics, commerce, or banking, and its meaning will vary with the viewpoint from which it is being considered. In the broad sense, exchange includes commerce itself or the interchange of goods. From a more restricted standpoint, exchange is the system of settling balances arising out of these commercial transactions. The mechanism of exchange renders unnecessary the sending of currency or bullion for the full reimbursement of each transaction, and payment under normal economic conditions is made to cover only the net differences between the total debits and credits. In its narrowest meaning, exchange is simply the business of buying and selling claims for the payment of money at a particular place. These definitions apply to both domestic and foreign exchange, but the two forms differ in respect to countries, currencies, and instruments involved. Domestic exchange settles balances arising out of transactions among individuals living in the same country, and using only one form of currency, but through instruments which are orders or promises to pay money such as checks, drafts, and notes. On the other hand, foreign exchange effects settlement in the business transactions of residents of different nations, in different forms of money, and only through orders to pay, such as drafts, bills of exchange, and cable transfers.

A bill of exchange is an evidence that one party has a claim on a second, and that this debt may be transferred to a third. As an illustration, an American exporter, having shipped cotton worth $20,000 to England, draws a draft for this amount on the importer. The drawer could make the bill payable to the order of himself, but it is more likely that he will prefer to have this money at his disposal in New York in the form of dollars, and therefore he sells the bill to some one who can use this claim to discharge a debt payable in London. The drawer transfers his claim by making the bill payable not to himself, but to the purchaser.

A bill of exchange may be considered as a certificate representing a claim to a certain number of monetary units, and when a bill covers a transaction in foreign trade its value may be expressed in terms of other currencies. The common basis of measurement in comparing these currencies has been the number of grains of gold in the monetary units of the nations using this metal as a standard. Since the pound sterling contains 113 grains of fine gold, and the dollar but 23.22 grains, the relative value of one sovereign in terms of United States currency is $4.866. This is the mint value as fixed by the governments, and is known as the mint price or the par of exchange.

II. Demand and Supply of Foreign Exchange.

While the par of exchange of a given monetary unit remains practically stationary, the market price or rate of exchange fluctuates daily. As in the case of any commodity, the market price or rate of exchange of any country varies directly with the demand, and inversely with the supply of bills drawn in terms of the particular currency. This demand and supply is influenced by the following factors: (1) movement of

goods and bullion, (2) investment of capital, (3) payment of services.

1. Movement of Goods.

When American firms import goods from abroad, they may make payment through buying bills of exchange drawn on foreign countries. This demand tends to raise the value of the foreign currency as expressed in terms of United States money. On the other hand, when American traders export goods, they may draw drafts on British buyers or their banks. Thus a supply of sterling bills is created in the New York market and its rate is inclined to fall. Before 1914 these fluctuations occurred seasonally, for in May, when British exports to the United States were at their height, sterling often rose to about \$4.88, while in October, when American grain and other shipments to England were heaviest, the sovereign fell to \$4.84.

In the prewar period the rate of sterling seldom fluctuated beyond these two limits, which were known as the gold points. A bill of exchange affords a claim upon a certain amount of gold, and it is generally more convenient and less costly to use this instrument than to ship bullion itself. However, if the price of the bill rises to an amount which exceeds the value of the gold plus the cost of its shipment, an American debtor who wishes to discharge an obligation in London would prefer to export the gold itself.

The expense of transporting gold bullion between New York and London before the war was estimated at two cents per sovereign, and this amount included such items as abrasion, freight, insurance and brokerage charges, and loss of interest. Adding this sum to the par of exchange, the gold-export point was \$4.886. Conversely, the gold-import point on London was the par of exchange, \$4.866 minus \$.02, the cost of ship-

ping gold equaling \$4.846. When sterling bills fell below this rate, an American creditor who held claims on London did not wish to draw a draft and sell it at so low a quotation in New York, but preferred to have the gold itself shipped. Gold import and export points also operated in other countries with the gold standard, and so to some extent the rates on bills of exchange for francs and marks moved within quite a narrow range. The international flow of currency and bullion was not entirely free even before 1914, for government control in most countries frequently restrained the export of gold. Due to the exigencies of the war, belligerent countries allowed the exchange rate of their currency to depreciate rather than permit the free movement of gold.

2. Movement of Capital.

The theory of the classical economists, such as Adam Smith, Ricardo, and Mill, as to international trade held that if a country's exports exceeded its imports in value, this surplus would necessitate the influx of gold to cover the difference. While it is true that over a long period of time, credits must offset debits on the international balance statement, it should be noted that merchandise and gold are not the only items which enter into the financial settlement between countries. They are only the visible items, and in addition there are several invisible factors which exert considerable influence on the rates of foreign exchange. An important item in the invisible balance is the movement of capital between countries. The investment of funds in foreign securities is a modern phenomenon in economic history, for its rapid development can be retraced only to the beginning of the nineteenth century. By this time the industrial revolution had multiplied the productive power of business, especially in England,

and had resulted in the accumulation of surplus capital, which was attracted into enterprises away from home because of larger profits and higher rates of interest. Among the factors which stimulated international investment are the following: (1) growth of railways, offering opportunities for placement of capital, (2) the development of corporate organization, enabling the gathering of capital by the issue of stocks and bonds, (3) improvement in communication disseminating information concerning foreign economic conditions, and thus giving better control over distant investments.

The export and import of securities affect the rate of exchange in much the same way as the movement of goods. When American investors purchase British securities these may be paid for in sterling, and thus a demand for British exchange in New York is created, with a consequent rising tendency in the rate of sterling. On the contrary, when British capitalists subscribe to an issue of Pennsylvania Railroad stocks, these are purchased in New York, where the supply of sterling bills is increased, causing a decline in the rate of sterling. These transactions could also be settled in dollar exchange. British securities could be bought by remitting dollar drafts to London, where the supply would be increased and its value would fall in terms of sterling. Likewise the purchase of American securities could be made by British investors through buying dollar exchange in London and thus causing an appreciation in its rates as expressed in sterling.

Dividend and interest payments would naturally cause a movement in exchange opposite from the investments themselves. For example, the semiannual payment of dividends on the Pennsylvania stock mentioned above would naturally necessitate settlement by the American corporation with its creditors abroad. The American company could make this settlement

by purchasing sterling bills, and this would tend to increase the demand in New York and so cause a rise in the price of sterling in terms of dollars.

Since 1914, governments have been compelled to borrow heavily and so have floated huge issues of securities both at home and abroad. These governments have also granted loans to one another, and in fact the European countries owe the United States government over $11,000,000,000. These items all vitally affect the rates of foreign exchanges.

3. Payment of Services.

In addition to securities, the invisible balance of trade is composed of other items such as charges of foreign shipowners carrying freight; payments to foreign companies issuing insurance policies; remittances of immigrants aiding relatives abroad; disbursements of tourists traveling for pleasure. Another factor which to-day extensively influences rates of foreign exchanges is speculation. It is applied especially to depreciated currencies, which are bought and sold not for the purposes mentioned above, but solely for obtaining profits from a rise or fall in rates. Thus at the present time the value of many foreign exchanges is not fixed by normal factors, but by unaccountable speculative influences.

The relative significance of the items which enter into the international balances of the United States is indicated in the table on page 258.

III. Foreign-exchange Market.

These forces of supply and demand exert their influence over foreign exchange so quickly that rates are quite uniform all over the world. Thus in a sense there is a foreign-exchange market which is international in scope. It is composed of the world's financial centers, such as New York, London, Paris, and Berlin.

STATEMENT SHOWING THE INTERNATIONAL BALANCE OF THE UNITED STATES ON OCTOBER 1, 1921. *
[In millions of dollars]

Items	1919	1920	1921 (9 months).	Total, Jan. 1, 1919, to Oct. 1, 1921
United States, creditor				
Excess of exports of merchandise	4,016	2,949	1,679	8,644
Net exports of gold and silver...	441	....	....	....
Net exports of Federal Reserve notes....................	91	103	....	194
Net interest payments receivable (private)..................	60	125	150	335
Net ocean freight payments receivable....................	220	140	50	410
Total credit items.......	4,828	3,317	1,879	9,583
United States, debtor				
Net imports of gold and silver..	....	70	559	188
Net imports of paper currency..	....	....	100	100
Net international payments of United States Government...	2,375	305	([1])	2,680
Net private investment of American capital abroad...........	300	235	250	785
American securities resold to United States...............	150	125	40	315
Immigrants' remittances and relief........................	600	700	300	1,600
Tourists' expenditures..........	50	150	125	325
Total debit items........	3,475	1,585	1,374	5,993
Net additions to unfunded credit balance of the United States..	1,353	1,732	505	3,590
Net balance on open account owed by United States on Dec. 31, 1918..................	....	....	....	882
Net unfunded credit balance of the United States Oct. 1, 1921[2]	....	....	....	2,708

* *Federal Reserve Bulletin* (1921), p. 1263.

[1] Definite figures not available.
[2] May be increased to $3,408,000,000 (see *Bulletin*, p. 1263).

They are closely bound to one another by cable and wireless communication, and each in turn is supported in its foreign-exchange operations by other cities in the same country having a smaller volume of business. Thus Boston, Chicago, St. Louis, New Orleans, and San Francisco are continually transmitting orders for the purchase and sale of foreign exchange to New York City.

Here, as in any other foreign-exchange market, buyers and sellers consist of business firms, investment houses, commercial banks, and brokers. The first group includes export and import houses handling goods, while the second is composed of investment concerns trading in stocks and bonds on an international scale, and so both groups buy and sell exchange as a subsidiary part of their regular activities. More directly interested in foreign exchange are the various classes of banking institutions engaged in financing international commerce. A bank trades in exchange both directly and indirectly. It deals directly with its customers, which include firms in foreign trade and correspondent banks without their own foreign department. However, most foreign-exchange operations are not transacted directly between buyers and sellers of bills, but indirectly through brokers who act as intermediary agents between merchants and bankers and between bankers themselves.

IV. Classes of Foreign-exchange Bills.

Bills of exchange bought and sold on the market are classified primarily according to whether the parties are bankers or merchants. A banker's bill is an order drawn by one bank on another to pay a specified sum of money. The drawee bank is usually a correspondent carrying a balance previously deposited by the

drawer. The usance of the bill may be either sight or time. As a banker's sight bill is drawn on a bank and is also payable on demand, it possesses the features of an ordinary check and is frequently known by that name. It is in every respect a negotiable instrument, and is usually payable to the order of a party. This sight draft, or check, is used when a bank sells foreign exchange. As an illustration, a person in New York, wishing to send £100 sterling to London, purchases this amount of foreign exchange from his bank, which generally gives him a draft drawn against its balance with a British correspondent. The purchaser then forwards the draft by mail to the payee, who receives the money on presenting the instrument to the drawee bank in London. In large transactions where quick communication is necessary, or in time of war when international mail service is uncertain, the cable transfer is used. As it is an order given by a bank to its correspondent to pay an amount of money on demand, the cable transfer is simply a form of banker's check. The two forms of exchange differ in that the cable transfer is forwarded over cable or wireless by the selling bank directly to the payee, while the check is given by the bank to the purchaser, who himself undertakes the responsibility of transmitting it. Furthermore, the cable transfer is payable only to a specified party and is thus nonnegotiable, while the check is usually drawn to order and is therefore transferable.

Bankers' bills drawn on a time basis state that payment will be made on a certain date or a number of days after sight. These time bills are further grouped according to whether the maturity is over thirty days. If less, they are called short bills; if over, they are termed long bills. Drafts of the latter type usually have a maturity of sixty or ninety days, and seldom more than one hundred and twenty.

Bankers' bills may also be classified according to the purpose for which they are drawn. As indicated above, a bank in the course of its business creates foreign-exchange bills to cover shipment of goods, reimbursing of freight charges, meeting of insurance premiums, forwarding of remittances, and paying of tourists' expenses. Of a different nature are those bills drawn in order to lend funds in a foreign money market. These advances are described as loan bills when supported by collateral, and are termed finance bills when based only on pure credit.

Trade bills are instruments, the parties to which are merchants. These bills are classified, in general, according to time and purpose. Demand bills can be drawn only by firms with extensive foreign business, but greater use is made of time drafts. These, in turn, are either long or short, depending upon whether their maturity is more or less than thirty days. As to purpose, bills drawn by commercial houses follow a classification quite different from that of bankers' bills. Drafts which arise from the reimbursement of services cannot very well be accompanied by any documents representing property which could serve as collateral. Such bills are described as clean or unsecured, and so their value depends entirely upon the credit standing of the drawer and also the acceptor. This group also includes all bills from which documents have been detached. Of greater importance in foreign exchange are drafts collateraled by certificates or documents evidencing the ownership of some form of property, and which therefore are called documentary, or secured bills. Secured bills may be protected by stocks and bonds which have been ordered by foreign investors and are surrendered to them upon their honoring the accompanying bills of exchange.

All documentary drafts are based on the shipment

of merchandise. The shipping documents thus attached to the bills are known as the "commercial set" and include bills of lading, insurance-policy certificate, commercial invoice, and several miscellaneous certificates of minor importance.

Possession of the documents, especially the bills of lading, is necessary before the importer is able to obtain the merchandise. If his credit is insufficient or if the merchandise is not readily marketable, the documents are surrendered only upon full payment of the drafts by the purchaser. If, on the other hand, his standing is satisfactory or if the goods are staples, as cotton or wheat, which can be sold readily, the documents are delivered upon the acceptance of the drafts by the importer or by his bank.

In summary, the various forms of foreign exchange may be grouped as follows:

Classification of Forms of Foreign Exchange

according to

—drawer	—time		—purpose	—security
bankers	sight	cable transfer	sale of goods	
		mail	services	
			remittances	
	time	short	advances	loan (secured)
		long		finance (unsecured)
commercial and trade	sight		sale of goods	clean
	time	short	services	documentary
		long		on acceptance
				on payment

V. Factors Determining Rates on Various Classes of Bills.

The rates quoted on the leading types of these bills are indicated in the following table:

Rates on Sterling Bills on October 4, 1921

Classes of Bills	Closing Rates
Bankers' ninety days	\$3.65
Bankers' sixty days	3.67
Demand sterling	3.72¾
Cable transfers	3.73¼
Bills—	
Grain	3.71½
Commercial, sight	3.72¾
Documents for payment, sixty days, against grain	3.66¾
Commercial ninety days	3.62⅞
Commercial sixty days	3.64¾

The variations found in the above rates on foreign bills are due largely to the element of time, and consequently of interest, which enters into the remitting of drafts. Banks quote the highest rate on their cable transfers, for these orders are payable immediately upon presentation by the payee. In the case of a sterling cable transfer, only a few hours elapse between the sale by the bank in New York and the surrender of funds to the beneficiary in London. A demand draft is forwarded by mail, and even on the fastest steamer it reaches the payee at least after seven days have passed. Meantime the bank which sells the draft has full use of this portion of its foreign balance, and is thus able to quote a cheaper price on demand drafts than on cable transfers. From the above table it is seen that the greater the difference of time in which the funds become available, the lower is the quotation

on the bill because of the difference in the interest charge. The element of time, and therefore of interest, does not enter into the quotation on cable transfers, which represent the exact market relationship between dollars and sterling in the above table, or between any two other currencies. The cable-transfer rate, therefore, is fundamental in determining the price of all other bills.

Rates on the various classes of bills are determined also by the extent of the credit risk involved. The credit factor is usually of minor influence in fixing the rates on bankers' bills. They are called prime bills when accepted by the stronger institutions, and all are usually considered of the same value. If a bank should place upon the discount market a volume of bills unwarranted by its resources, such policy would soon operate to depress rates quoted on its drafts. A differentiation is sometimes made between one-name and two-name bankers' bills. Those drawn by a bank on its foreign branch or on an affiliated institution will ordinarily bring a lower rate of exchange because of the identity between drawer and acceptor, and the consequent single responsibility of the parties to the instrument. When a first-class bank draws on a separate institution of standing, the accepted bill gives the holder a twofold security, and therefore commands a higher price in terms of foreign money.

Trade bills drawn by mercantile houses on other business concerns vary in their market quotations according to the credit standing of the parties. Drafts of less-known or doubtful firms are sold only with difficulty. These bills may at times find a market if they are based on staple goods which are nonperishable and in active demand. The value of such drafts is then determined not by the credit standing of the parties, but by the security in the goods.

VI. Foreign-exchange Quotations.

As foreign-exchange trading has no organized market where dealers are in personal contact with one another, prices are not exactly uniform, and so there are several kinds of quotations. As in any market, there is always a "bid" price at which the prospective purchaser offers to buy, and an "asked" price at which the seller is satisfied to make the sale. In foreign exchange, the former price is known as the bank's buying rate, and the latter as the selling rate. Between these two rates there is a difference or "spread" which represents the bank's profits. Actually the bank does not quote the same buying or selling rate to all customers, for these quotations will differ according to the value of the account to the bank and the size of the transaction. The "market" quotation, which approaches closely the actual daily buying or selling rate, is given by the bank to large commercial houses only for wholesale orders for exchange. For smaller or retail transactions involving the remitting of funds by individuals, the bank's quotations are naturally higher. All these quotations represent actual offers on the part of the bank to buy or sell exchange, and so are called "firm" rates. Banks also issue "service" rates to their customers as a matter of market information, but not as a real offer or a bid for exchange.

The rates presented on page 263 are quoted by the direct method, which states the number of home units payable for one foreign unit. Thus $3.65 is the equivalent of one pound sterling. Foreign-exchange rates may also be quoted indirectly, and in this case the value of one home unit is expressed in terms of the number of foreign units which it commands. Before 1914, one dollar was the equivalent of 5.18 francs. For many years both methods of quoting rates were

employed in the foreign-exchange markets, but in order to avoid confusion the dealers of the New York market in 1921 agreed to use only direct quotations, and thus all rates for foreign currencies are quoted in dollars or in cents.

VII. Trading in Foreign Exchange.

The buying and selling of foreign bills of exchange is known as trading. In performing this function the banker acts as middleman between those who have bills to sell and those who wish to buy. The banker does not actually resell the identical bill from one party to the other, but sends the purchased bills abroad to be collected by his correspondent, who credits the proceeds to the account of the sender. In buying bills, the banker increases his balance in foreign-money centers and so creates a fund which may be regarded as his supply of foreign exchange. These foreign-exchange balances are reduced through sales of exchange. Thus a purchase of exchange is a credit added to the banker's balance abroad and a sale is a debit.

The orders which a bank receives for buying and selling foreign exchange are executed or filled in various periods of time. A spot delivery necessitates the immediate surrender of the draft by the seller. In the case of a prompt delivery, several days are allowed for completing the delivery. A third type is arranged in what is known as a future, or "forward," contract, which is an agreement by a bank to purchase or sell a certain amount of foreign exchange at a fixed rate for delivery, not at the present time, but on a specified date in the future. The interval between the actual purchase of the exchange and its eventual delivery may extend from several days to several months.

The procedure in selling a future exchange may be illustrated by a typical transaction. For example, in April the American Cotton Exporting Company sells to the British Importing Company a consignment of cotton worth £10,000 for shipment in July. The American firm is unwilling to assume the risk of loss through fluctuation in the value of sterling, and prefers to know exactly what the transaction will be worth in July as expressed in dollars. The American Exporting Company is in possession of a certain amount of future exchange which it desires to sell, and so approaches the banks directly or indirectly through a broker, until it finds a purchaser who accepts the exchange. In July the exporting company ships the cotton, draws a draft on the importer, and delivers the bill with the shipping documents to the bank which has previously agreed to purchase it. The bank examines the draft and documents, compares them with the contract or agreement made in April, and if all conditions have been fulfilled, it pays the exporter for his draft, which is then forwarded abroad. In this transaction the exporter bears only the commercial risk arising from fluctuations in commodity prices, while the banker assumes the exchange risk resulting from the variations in the rates.

The bank is not compelled to carry this risk if it follows a policy of hedging or covering. A cautious bank will so arrange its trading as to make sales and purchases of exchange simultaneously, and, since debits will thus offset credits, its foreign balances will remain stationary. Profits will then be confined to the difference between the selling and the buying rate on bills.

The bank may at times seek larger profits by speculation in exchange, in what is known as "taking a position on the market." A bank may follow a policy

of going "long" on the market through buying bills at the prevailing rate and afterward selling them at a profit, provided the rate has risen in the meantime. The "short" side may also be taken by selling bills at the current price in anticipation of a fall in the rate, thus enabling the repurchase of drafts later at a lower quotation. These transactions are the same as the ordinary forms of speculation which seek to obtain profits from differences in prices in the same market at different times.

Another type of foreign-exchange speculation involving comparatively little risk is known as "arbitrage"; it is based on profits which arise from prices quoted in different markets, but quoted all at the same time. As in any other foreign-exchange operation, the aim is to buy at the lowest price and sell at the highest rate. This object is usually accomplished by buying one kind of currency directly with a second, such as francs with dollars. An arbitrage transaction, however, results in a trade indirectly through a third, or intermediary, market. Assume that in New York, on a certain day, the franc is worth 19.25 cents, and the pound sterling \$4.86. In London, on the same day, francs are quoted at 25.25 for one pound sterling. While 2,522 francs in New York cost \$486, it would be cheaper to trade in the London market, where \$486 (worth £100) will buy 2,525 francs. Thus a profit of three francs would result. When only three markets are involved as in this illustration the transaction is known as a simple arbitrage. A compound arbitrage affects four or more centers. Arbitrage is also used in the investment field. When a security, as United States Steel, is selling at a higher rate in London than in New York, it may be worth while to cable an order to sell shares in London and at the same time cover this transaction through buying an equal amount of the stock on the New York

Exchange. Besides securities, the principle of arbitrage may be applied in buying and selling bullion or any other commodity which has a free international market. Arbitrage tends to neutralize wide fluctuations in rates, by eliminating differences in rate, and thus bringing prices near to equality in all markets.

CHAPTER XVII

FINANCING FOREIGN TRADE

I. Special Nature of Foreign Trade Finance.

In the preceding chapter foreign exchange was considered in its application to all forms of international business such as shipment of goods, sale of securities, and payment of services. In this chapter attention will be given only to the methods of financing the export and import of goods.

The financing of foreign trade is a problem difficult for both merchants and bankers because of their inability to determine the credit standing of foreign buyers. It is practically impossible to secure information from these firms themselves, since the use of the credit statement is little known outside the United States. The necessary facts must be gathered by indirect means. In this work, correspondent banks and branch offices are called upon to express their judgment, but these responses generally furnish little information, for they are based on personal opinions rather than on credit files. The general mercantile agencies, as Dun and Bradstreet, have extended their organizations to foreign fields and are developing a credit service similar to that established in the United States. Because of difference in nationality, local feeling against supplying information, and distance between the two countries, very little knowledge can be gathered about the credit standing of the merchant.

This lack of credit information concerning commer-

cial houses vitally affects the nature of foreign trade financing, and differentiates it from the procedure used in domestic commerce. In the first place, banking institutions are relatively more important in international trade, for it is necessary to use their better-known credit in place of the limited standing of the commercial houses in order to induce sellers to part with their goods.

II. Documents in Foreign Trade.

In addition to what precedes, the absence of credit knowledge limits the amount of unsecured loans extended in foreign trade and therefore most advances are based on some form of collateral. In the movement of goods, this security lies in the shipping documents which accompany the drafts drawn by the exporters. Because of the prime significance of these documents in all phases of foreign trade finance, they will be considered at the outset. The shipping documents attached to the drafts include, as a rule, the bill of lading, insurance policy or certificate, commercial, consular invoice and several miscellaneous certificates of minor importance. Most essential of the entire set is the bill of lading, which performs two distinct functions. In the first place, it serves as a receipt from the transportation company that the goods have been accepted for carriage and will be delivered to their destination. It is used also as a document which indicates the ownership of the goods.

These two functions offer a basis for classifying bills of lading according to carrier and to negotiability. Bills of lading may be of the following kinds: (1) railroad, for goods moved by rail between domestic points; (2) ocean, for freight shipped on board a vessel to foreign countries; and (3) through, for merchandise trans-

ported by both rail and steamship or two different steamship lines from inland to foreign points. Bills of lading are not necessarily negotiable. The straight, or nonnegotiable form is filled out in the name of a specified party, known as the consignee, who has the right to demand delivery of the shipment from the carrier without even producing the bills of lading. This type offers no security to the banker who has acquired an interest in the goods through granting a loan to the shipper or consignor. A negotiable bill of lading only is regarded as satisfactory collateral for a lending bank, as this document must first be presented to the carrier before the consignee or any other party can take possession of the goods. Bills of lading are drawn directly to the shipper's order, or in blank and then indorsed by him. In this way the bank holding one or more copies controls the ownership of the goods and can transfer this title by mere indorsement. Bills of lading can be forged easily by freight agents acting in collusion with unscrupulous shippers, and in consequence banks suffered heavy losses for many years. The Knight-Yancey cotton frauds alone cost the banks several millions of dollars through payments made on bills of lading which were supposed to represent shipment of cotton, but which, in fact, were forgeries by railroad employees. To prevent the recurrence of these practices and to protect the rights of banks discounting drafts accompanied by bills of lading, Congress passed the Federal Bill of Lading Act which became effective on January 1, 1917. Among other provisions, this statute holds the carrier responsible for any bill of lading issued by its agents, whether the instrument be true or fraudulent.

The second document in the commercial set is the marine-insurance policy. This is a contract whereby a merchant or a shipowner is indemnified by an under-

writer or assurer in event of loss sustained by the assured party. Insurance is not taken out to cover goods transported by rail, for under American law a domestic carrier is fully liable for goods. This statute does not affect an ocean steamship company, which assumes very few of the many risks encountered in conveying merchandise overseas. In forwarding a number of shipments, the sender usually applies to the insurance company for an open or floating policy covering all transactions, and under this general contract a separate insurance certificate is drawn to apply to each shipment. In time of hostilities, shippers also insure their goods against war risk. Since the close of the war mine-risk policies have been continued in order to indemnify owners of merchandise against possible loss from floating mines.

Third in the set of documents accompanying a foreign bill is the commercial invoice. This instrument contains a complete description of the merchandise, the terms under which it has been sold, and the parties involved. The invoice states the quality and quantity of the goods in detail, the price and all discounts, together with the names of the buyer and seller and any agent who may have been party to the sale. The commercial invoice is of particular interest to the bank, which learns the price paid for the goods and is thereby aided in judging the extent of the loan to be granted on this security.

In addition to the bill of lading, insurance policy, and commercial invoice, a foreign draft may also be accompanied by several other documents. In order to secure the entry of goods into certain countries, it is necessary to obtain a consular invoice in which the government representative of the importing country certifies to the origin of the goods and their current value as expressed in the market of the exporting

country. The consular invoice can be used by customs officers of the importing country as a means of levying ad valorem tariff duties which are based on the selling price of the goods. Governments sometimes insist upon a health certificate which certifies to the sanitary condition of certain classes of exports which may carry contagious disease. This statement is required especially in the case of hides and skins in order to guard against the spread of anthrax. Importers often demand certificates of weight, measure, and analysis so as to assure themselves that they will receive merchandise of the quantity and quality specified in the contract of sale. Finally, the banker who purchases the bill may exact from the exporter a letter of hypothecation, which recognizes the assignment of all the above documents, and thereby the ownership of the goods, to any holder of the draft.

III. Financing of a Shipment by the Exporter or His Bank.

The burden of financing a shipment of goods may be carried by the exporter, the importer, or their respective banks. The exporter's bank finances the transaction when it discounts his draft drawn on the buyer, for in purchasing the bill the bank pays cash for it or credits the exporter's account with the amount. The procedure is quite similar to that of discounting commercial paper in domestic business. The bill is offered for purchase, and if the credit of the parties as well as the value of the goods proves satisfactory, the bank will deduct the discount charge, deliver the proceeds to the drawer of the draft, and collect the full amount from the drawee. The bank as bona-fide holder of the bill expects to receive payment from the drawee, and, if he dishonors the bill, reimbursement will be demanded from the drawer.

Foreign bills drawn by the exporter may be given to his bank for collection, and in this case the customer does not receive credit to his account until the proceeds of the draft have been remitted from abroad. Compared with a bill held by the bank for collection, a discounted draft may be regarded as a cash item, since the customer receives immediate credit. A further difference between these two instruments is to be found in the legal position of the bank, for it is the owner of the purchased bill, while in the forwarding of a collection item it is acting merely as an agent of the exporter.

Collection items may cover all kinds of foreign-exchange transactions such as the handling of shipments, loans, remittances, and insurance, but for the purpose of this chapter only the first need be considered. A bill is forwarded to the bank for collection rather than for purchase, when the exporter has sufficient capital to finance the transaction himself and is thus able to save the discount charge. At times the bank is unwilling to buy the bill outright because the credit standing of the parties does not warrant this step, or the underlying merchandise is not readily marketable.

Both discounted and collection bills are forwarded in much the same manner. They are transmitted to a foreign correspondent bank, which presents them to the drawee, who accepts or pays, whichever the case may be, and then the funds are either remitted to the American bank or credited to its account. Upon receipt of the cash or the credit, the American bank deducts the charges for collection and turns the remaining proceeds of the bill over to the exporter.

The burden of financing a shipment of goods may be carried by the exporter and his bank jointly by what is known as an advance collection. The bank may receive the bill for collection, and use the instrument

as collateral to lend the exporter about 70 or 80 per cent of the face amount. When the draft is finally collected the bank first reimburses itself for the advance, interest, and collection charges, and then delivers the balance to the exporter.

Credit for financing a foreign transaction is also supplied by the exporter's bank through what is known as a refinancing acceptance. Under this method the exporter and his bank enter into an acceptance agreement. In accordance with the terms of this contract the exporter draws his draft on the importer and surrenders this instrument, together with the accompanying documents, to his bank, which forwards them for collection. In return the exporter is permitted to draw a clean time draft on the bank which accepts it. The instrument then becomes a banker's acceptance which the exporter may sell in the open market.

IV. Financing of Foreign Trade by the Importer.

In foreign trade the sellers and buyers of merchandise are confronted with greater risks than in domestic commerce, and so it is necessary for both parties to take measures for the protection of their interests. The exporter desires reimbursement as soon as he releases his goods, while the importer does not wish to make payment until he is sure that he will receive the goods which he has ordered. These ends are attained by the use of two documents known as the "authority to purchase" and the "letter of credit." By means of these instruments, the exporter is authorized to draw his drafts and is assured that they will be honored, provided he delivers documents evidencing the shipment of the goods ordered by the importer. The authority to purchase is issued by one bank instructing a second bank to buy the drafts drawn by the beneficiary

on the importer, and thus the document gives rise to a trade bill. Ordinarily it could not well be sold, especially if drawn on a foreign firm whose credit standing is little known, but this difficulty is overcome, since the bank agrees with the exporter to buy his draft. Because of the restricted marketability of such trade bills, the authority to purchase is not used extensively, and in fact is limited to the financing of exports to the Far East.

The letter of credit has widespread application in foreign trade, for it aids the shipment of goods to all parts of the world. The letter of credit differs from the authority to purchase in that it instructs the beneficiary to draw his drafts not upon the importer, but upon a bank, thereby substituting its better-known credit for the limited reputation of the importer. The use of the letter of credit may be illustrated by tracing the financing of a shipment of merchandise. The American Importing Company of New York has ordered £1,000 worth of cotton goods from the British Exporting Company of London, and the two concerns have entered into a sales contract which specifies among other conditions that the importer must supply a banker's credit. The American firm thereupon requests a letter of credit from its New York bank, which first investigates the applicant's standing with the same care as in extending a loan. If his credit is considered satisfactory, the bank requests him to sign a contract in which the bank agrees to issue the letter of credit on behalf of the importer, who, on his part, promises to pay the commission for this service, to reimburse the bank for all outlays, and to pledge the merchandise as security.

The American bank, as credit issuer, may inform the British Exporting Company of the opening of the credit by delivering the letter to the importer, who mails it

to the beneficiary. The American bank may also send its London correspondent a cable stating that a credit has been opened in favor of the British firm, and the London bank then transmits this information to the exporting company. Whether the credit is received by mail or by cable, the recipient immediately prepares the goods for export and forwards them to the seaboard, where they are placed on a vessel for New York. The exporting company then draws its draft upon the American credit-issuing bank and presents it for discount, together with shipping documents, to a British bank, usually the same one which has advised the credit. The documents are first compared with the letter of credit, and if the terms have been observed the draft is discounted. The negotiator then sends both draft and documents to its New York correspondent, which presents them to the credit-issuing bank. If it is a demand bill, the bank pays immediately, and receives reimbursement from the importer before giving him the shipment documents which are necessary for him to secure possession of the goods from the carrier. In the case of a time bill, the bank accepts it on behalf of the importer and gives him the documents usually after he has signed a trust receipt acknowledging that he is holding the merchandise merely as trustee for the bank. The importer then warehouses the material and later sells it to some one else, and the proceeds are delivered in an amount sufficient to place the bank in funds to cover the acceptances usually a day before their maturity.

As indicated in the above illustration, a letter of credit is the authorization addressed to the beneficiary by the credit-issuing bank, under which the former is instructed to draw drafts up to a specified sum and within a definite time upon the latter, which undertakes to honor the drafts if they are accompanied by certain

documents. As this instrument in foreign trade is addressed by a bank to a seller located abroad, it is sometimes described as an "import" letter of credit. Where the information is transmitted through another bank in the same country as the beneficiary, the advice is called an "export" letter of credit.

V. Classification of Letters of Credit.

Letters of credit may also be classified, according to whether the issuing bank may or may not rescind its obligation to the beneficiary. When a bank agrees to honor the drafts of the exporter within a certain period of time the instrument is called an irrevocable letter of credit, while a revocable credit may be canceled at any time by the bank. Letters of credit are frequently transmitted to the beneficiary not directly by the issuing bank, but indirectly through a second notifying bank. If the latter institution adds its guaranty to the obligation of the former, the letter of credit is then said to be confirmed, otherwise it is considered unconfirmed. Banks may therefore give beneficiaries the following kinds of credits: (1) irrevocable by issuer and confirmed by notifier, (2) irrevocable by issuer and unconfirmed by notifier, (3) revocable by issuer and unconfirmed by notifier. A revocable confirmed letter of credit is of course impossible in actual practice, for a notifying bank would under no condition add its confirmation to an instrument which could be nullified by the issuer at will.

Letters of credit may also be grouped according to the currency in which they are issued. Before the war the letter of credit drawn in sterling was the standard instrument of international commerce, but in recent years the dollar credit has been growing in favor, not alone among American merchants, but also with foreign firms.

VI. Traveler's Letter of Credit.

The instrument of commerce described above is frequently confused with the traveler's letter of credit. These two documents differ as to purpose, form, and classification. The former is used to facilitate the movement of goods, while the latter serves as a means of paying the expenses of a person who is journeying from one country to another. The commercial letter of credit is addressed by the issuing bank to the beneficiary, who is authorized to draw his drafts, while the traveler's letter is addressed by an issuing bank to another institution, which is requested to honor the demand drafts drawn by the traveler on the issuer up to a specified amount and before a fixed date. A bank usually issues a traveler's letter of credit upon payment of the full amount by the beneficiary, in advance, or it may receive reimbursement only as each outlay is made by the traveler. As noted above, commercial letters of credit were classified fundamentally on a basis of whether or not they can be canceled without the consent of the beneficiary. This question never enters into the issuing of a traveler's credit. The document is classified rather according to the number of banks which are requested to act as payers. The traveler's letter of credit may be addressed to only one bank, and it is then said to be a specially advised form. As traveler's letters of credit are frequently lost, this type has the advantages of being easily canceled and of stopping further payment of drafts drawn by persons other than the proper beneficiary. The circular, or general letter of credit gives the traveler the right to negotiate his bills with a number of correspondents, which are at times listed on the letter of credit. Traveler's credits are drawn in dollars, pounds, francs, or any other currencies desired by the beneficiary.

The traveler's letter of credit is of advantage to all parties concerned. The traveler is furnished with the current funds for his journey, thus eliminating the risk of carrying a supply of cash, and at the same time the letter also serves as a dignified introduction from his bank. This institution collects a commission on the total amount, and also has use of the funds until they are actually expended by the traveler. The foreign correspondent bank which negotiates the drafts usually buys them at a rate lower than the market price, and thus gains a profit on the exchange.

VII. The Organization of a Foreign Department.

In this survey of international banking, its similarity to and its difference from domestic practice has been surveyed, and now the special features in the organization of a foreign department will be indicated. This department is usually organized under the following divisions: (1) exchange (engaged in buying and selling foreign bills); (2) loan and discount (grants advances on foreign bills or buys them outright); (3) collection (forwards to foreign correspondents for payment all bills purchased by the bank or received from customers for collection); (4) commercial credit (opens import and export letters of credit).

VIII. Development of American Banks Financing Foreign Trade.

For many years these services could be secured by American exporters and importers from foreign banks with New York agencies only or from a small number of private banks. In recent years, however, large national banks and trust companies have opened foreign departments and have thus materially aided the expansion of our foreign trade.

It was necessary for these institutions to establish close relations with important money centers throughout the world. Such associations were secured in the past by employing the services of foreign banks as correspondents. This plan was followed by many American banks because of their own inexperience and lack of credit information. The necessary connections with foreign-exchange markets are also attained by establishing branches. As practically all the American banks interested in foreign trade have been located in New York, this state was the first to authorize the operation of branches abroad. Accordingly, several trust companies opened offices in London and on the Continent. This power was denied to national banks until 1916, when an amendment to the Federal Reserve Act permitted institutions with a capital and surplus of over $1,000,000 to establish foreign branches, but this privilege was exercised by only two banks.

Meantime, American banks tended to expand their international relations not through the opening of branches, but through the organization of overseas banks engaged exclusively in foreign trade. Under the laws of New York State, banking institutions were permitted to hold stock in corporations financing foreign trade, and accordingly a number of them have been founded. These international houses perform all banking operations, but have generally limited their activities to the Far East and to South America. In 1916 the Federal Reserve Act likewise empowered national banks with a combined capital and surplus of over $1,000,000 to invest 10 per cent in the stock of foreign banking corporations, whether organized under the laws of the state or those of the federal government. These provisions were further extended in 1919 by the McLean Act, which permitted any national bank, regardless of its size, to invest 5 per cent of its capital and surplus

in the stock of a foreign banking corporation. But as a matter of fact Congress had never made provision for the organization of overseas banks under national law. The need of further legislation was accentuated by our unbalanced trade, which continued even after the armistice. During the war the movement of goods in international trade had been financed largely through the extension of government credit, and upon its withdrawal American banks found difficulty in furnishing credit sufficient in amount and in maturity to meet the needs of foreign buyers.

For these reasons, Congress in 1919 passed the Edge Act. This statute seeks primarily to provide long-term credit for foreign purchasers of American exports. To attain this end the statute authorizes the organization of corporations with capital stock of not less than $2,000,000 and under the supervision of the Federal Reserve Board.

In accordance with the regulations of the board, two types of Edge-law corporations have been organized. One form is a commercial bank empowered to create acceptances based on exports to foreign countries and to operate branches abroad. The second type is rather an investment bank. It is not permitted to make acceptances or conduct branches, but is given full power to issue and sell its own debentures. These obligations may be based on two classes of collateral held in trust: (1) commercial paper of a self-liquidating nature, (2) foreign securities.

The American Bankers' Association projected in 1921 a large Edge corporation and offered $100,000,000 of stock for the purpose of purchasing high-grade foreign securities and using them as collateral to protect its own debentures. The object was to sell the obligations of an American corporation to the investing public, which might be unwilling to absorb foreign securities directly.

In this way the unbalanced trade between the United States and the rest of the world, which can be corrected neither by the shipment of gold because of its insufficient amount, nor by the importation of merchandise because of its reaction on American industry, would be stabilized by the export of capital from the United States through foreign investments. The future of foreign trade financing is still uncertain.

CHAPTER XVIII

BANKING METHODS IN FOREIGN COUNTRIES

I. Difference in Relationships Between Business and Banking in the United States and Great Britain.

While banking methods are in their essential nature the same in all countries, there are differences of detail which exist as between the principal commercial nations, and which must be understood by those who are either familiarizing themselves with banking methods in general or who have business to transact with foreign countries. It would be impossible to furnish in great detail the points at which variations of practice exist. Some of the chief lines of difference must, however, be set forth. In what is here said it must be remembered that "foreign" methods are by no means uniform, but that the various foreign countries differ much among themselves, while on the other hand business practice is itself unstable and changes from time to time, so that only broad generalizations can be made.

Perhaps the most striking difference in the relationship between the business man and the bank is noted when comparison is made between American practice and the practice which prevails in Great Britain and other English-speaking countries. Whereas an American establishment may, and indeed usually does, maintain several bank accounts, borrowing from a variety of banks and at times also selling paper in the open market, the British business man feels constrained to confine himself ordinarily to one or, under unusual

conditions, two banking establishments. There is an important application of theory which underlies this difference in practice. Foreign and especially British banks hold to the view that there is a close affiliation between the business establishment and the bank, and that the bank should be prepared to sustain and support the business establishment in all legitimate operations which fall within its general scope. In these circumstances it has a right to know intimately the condition of the business and to keep a constant check upon the uses made by the business house of its funds. This is hardly practicable where the business establishment deals with many banks. On the other hand, the lower degree of publicity with respect to bank accounts which exists in England and in English colonies would practically prevent the bank from keeping as close touch with the affairs of the individual business house as it could were that house to deal with it and with it alone. The branch system of banking, which prevails in most foreign countries but is not permitted under the banking laws of the United States, renders this close relationship between the bank and the business house feasible. It certainly could not exist in that form in any country where the business establishment maintained many offices or branches and the bank had but one office. The different character of the relationship which thus exists between business and banking in the United States and in other countries furnishes an influence which ramifies broadly into many fields and produces alterations of practice that are often regarded as merely accidental, notwithstanding they grow out of the condition just described.

II. Comparison of Methods of Financing Business.

Partly as a result of the different relationships existing between the business and the bank as thus set forth,

there is to be noted a peculiarity in the method of financing industry which has taken root in the United States. In this country it has become more and more the practice for the manufacturer, or, in some lines, the wholesaler or jobber, to finance the retailer, while the retailer finances the customer. This situation is seen in most extreme form in the sale of goods upon the installment plan. The manufacturer of farm machinery or pianos, let us say, sells his product to a jobber or distributor, who gives a note or acceptance for the amount due at a maturity which varies from trade to trade. The distributor then, either through a retailer or perhaps in direct sale to the customer, disposes of the goods which he has thus taken on. He allows the consumer to pay for them at so much a month over a period of, say, twelve months. It is clear that in this case the merchant who sells the machinery or pianos to the purchaser has to provide the capital for carrying them during the period of payment. This he can do if the manufacturer's claims upon him run for an equal length of time. In that event the real burden of financing the whole series of transactions may be transferred to the manufacturer's banker through the applications of the manufacturer to him for funds with which to carry his operations during the months between the selling date and the date of payment.

In foreign countries, although the American method of financing at the source has made progress of recent years, the older plan was that of doing the financing at the point of distribution. The manufacturer sold to the distributor on a short-term credit basis, and the distributor, if he needed funds, got them from the local bank. The credit he extended to the consumer was shorter, or in some cases the consumer might be requested to give paper for anything more than a very small current open account representing daily supplies.

This difference in financing was not so significant in foreign countries as it is in the United States, because the lending of funds to the retailer or distributor was then often done by a branch of the parent bank whose head office perhaps was situated at the point of manufacture. Still, the difference was of very considerable importance from the technical standpoint.

III. Character of Paper.

Growing out of this difference in practice regarding the location of financing there has been of late years a distinct difference of practice with respect to the character of the paper by which loans were represented. In the United States the predominant type of bank loans is the "straight single-name note" already described and illustrated (see page 110). This note, as already explained, may be either secured or unsecured. In the same way under the classical foreign practice the predominant type of bank paper was the acceptance, as already explained and illustrated (see page 30). As has been seen, there is no difference in the character of the obligation incurred by the maker of a note and the acceptor of a draft. The two types of financing may, however, lead to somewhat different results. In the older British practice the acceptance was drawn to represent a shipment of goods. The goods accompanied the draft or perhaps followed it within a short time. In the United States the single-name note may or may not represent a shipment of goods. In its best form it represents a lump sum of bank funds or "accommodation" which does not exceed the power of the business at any time to pay out of its "liquid" assets. In American practice, such an advance may be used for any purpose; the test of banking wisdom or prudence being found in keeping the total amount of such advances or loans down to the proper figure. It is

true that in Great Britain and some other countries there has of recent years been an increasing practice of lending on "overdraft account" which represents exactly the same banking idea as our own unsecured straight note, the chief technical difference being found in the fact that whereas American practice requires the making of an actual note, foreign overdraft practice merely enters a book charge against the customer.

IV. Credit Study.

The American single-name-note and cash-discount method of lending, however (and for that matter the overdraft plan in so far as adopted), necessitates a special type of credit study. Since the goods do not accompany the draft or note, thus evidencing an actual sale, the superficial test of liquidating power which is thereby furnished disappears. It is necessary to obtain a test of liquidating power from some other sources, and this can be done by making a careful analysis of the business establishment from the credit standpoint. Hence the growth of credit-analysis departments in American banks upon a scale considerably superior to that which exists in many foreign countries. The purpose of American credit-analysis is to ascertain the conditions under which a business is operating, the probable amount of its requirements, the sums which it can be expected to pay readily out of current operations, and, as a corollary from these items of information, the conclusion whether advances that have been applied for ought to be granted or not. This type of credit analysis is at times scientific in the highest degree, and when accompanied by the best quality of banking prudence and judgment undoubtedly gives rise to a higher type of banking loan than that which has prevailed in most foreign countries. The expressed opinion of some leading American bankers is that

"prime" single-name notes of the best American business houses are probably the best type of commercial paper in existence—certainly not exceeded even by the "prime" acceptances of foreign countries. At all events, the difference in the method of lending has important results which are reflected in business, and the distinction which has been drawn between our own and foreign practice is therefore worthy of careful study.

V. Method of Credit Extension.

Foreign banking methods differ from American not only in the matter of technic and in the relationship which exists between the individual and his bank, but also from the standpoint of internal banking management, as well as from that of general credit extension. On the latter point the differences of practice and method are rather important. In a general way there are, as the reader is aware, two important methods by which banks extend credit—the one the issue of notes, the other the creation of credit deposits which are drawn upon at the pleasure of the borrower. In the United States the latter method of extending credit has become almost preponderant. There are large issues of bank notes, of course, and in some parts of the country they have a function of extreme importance to perform. But it may fairly be said that the banking development of the past fifty years in the United States has been almost wholly along the line of the deposit, and that the note has played a more and more subordinate part as time has gone on. Very much the same is true of Great Britain, and for somewhat the same reasons. When we turn to continental banking, however, it is observable that the main line of development has been in a somewhat different direction. In France, for example, the central bank, while carrying large

lines of deposits, has granted the preponderating part of its accommodation in the form of notes. Other banks have then taken these notes and held them in their vaults as reserves, while business men, instead of checking as freely upon banking accounts as do American business men, have been more in the habit of keeping the notes in a safe or strong box out of which they would be paid as occasion required. The distinction between the two types of banking may be strongly emphasized by contrasting a statement of the Second Bank of the United States, which terminated its career in 1837, with the statement of, say, one of the large New York banks for the year 1920.

From such comparison it is obvious that the bulk of the loans made by the Second Bank of the United States must have been made in the form of notes, while the New York bank could not have done much business had it been limited to its note liability. A similar comparison might be drawn between one of the London joint-stock banks to-day and the same institution fifty or sixty years ago. This distinction is of a good deal more than merely technical importance. It is founded upon the different business habits or practices which grow out of the fact that in some countries actual money or a substitute for it is wanted in business, while elsewhere the check-and-deposit system is more acceptable. Under the two systems very considerable differences in practice naturally arise.

It is not necessary to go into these differences at this point, and it need only be said that in the main the check-and-deposit system, as exemplified in American banking, is one which minimizes the use of cash and results in the clearing of a very large amount of obligations without any employment either of money or of money substitutes, but that this system has a tendency to instability, due to the fact that its basis may

be rapidly weakened by the export of coin or by the withdrawal of it from banks. Conversely, inflation is more easily produced through the sudden growth of bank deposits. In the countries which have developed along the note or circulation line of growth large quantities of currency are held in circulation. A given amount of them is practically necessary at all times in order to do the business of the country. The central note-issuing bank is thus performing a quasi-public function in supplying notes, and the stability of the system is greater because the needs of the community for the notes and currency are such that they tend to keep a given volume of them in circulation constantly. This is true even where the redemption is quite rapid—that is to say, where the whole volume of notes is redeemed by the issuing bank within a very short time.

Such rapidity of contraction is called elasticity when it is accompanied by correspondingly easy expansion. It has little to do with the amount of notes held in the circulation at any given time. This difference of practice as between continental countries, on the one hand, and England and the United States, on the other, also implies great difference of practice in remittances and collections and tends to produce a quite different ideal of the banking situation. A credit deposit plan is practically necessary to business as it is organized in the United States. Across the Canadian border, where industry is organized on a rather more primitive basis and under the branch-bank system already described in this volume, there is a much greater reliance upon notes and relatively smaller use of checks, notwithstanding that the number of banking offices in Canada is very large. In general the note finds its best function in the community which is not much accustomed to checking and is not encouraged to resort to banks,

while those countries which have made banking simple and easy of access usually find that customers promptly give up the use of notes and substitute credit instruments in lieu thereof.

VI. Foreign and Domestic Trade Financing.

A further distinction between American and foreign banking methods is seen in the different emphasis which is placed, respectively, upon domestic and foreign trade in foreign countries. In the United States, foreign trade operations have been given a very special place of their own, and the emphasis has been laid almost entirely upon domestic banking and its development. In Europe, almost exactly the reverse of this situation exists. The distinction is due to the difference in the size of the countries and to the character of their financial development.

VII. Personnel.

One other element in foreign methods which distinctly differentiates them from those of the United States is seen in the fact that in Europe banking has become a highly professionalized occupation. In the United States it has until recently been looked upon rather as a business. The distinction may seem at first sight to be one of secondary importance or an observation which is of interest rather from the broad general standpoint than from the point of view of actual organization of banking. It, however, relates to a condition of affairs which is of considerably more inclusive character than would thus be suggested. The banking personnel of the United States is recruited after methods running very closely parallel to those which obtain in connection with its banking organization. As has elsewhere been seen, however, in European countries—indeed, in almost all foreign countries

—the establishment of a new bank is looked upon as an undertaking of very great moment to the community and as deserving in some countries of special authorization by the legislature, while in others it is so surrounded with difficulties of one sort or another that the number of banks increases very slowly. In the United States, as we have seen, however, the object of the law has been that of encouraging the growth of small banks. This is reflected in the fact that a single year may see the organization of hundreds of such institutions. In the national banking system alone the number of banks organized during the year 1920 was about 300. If the number organized under state laws were to be added, the total figure would probably come to double that which has just been given. It need hardly be said that with so many banks coming into existence it is difficult to obtain a trained and well-equipped personnel.

The personnel is, therefore, recruited for the most part from commercial businesses. A few employees of the older banks are engaged to train the personnel of the new institution. The result is to establish in many banks a rather unsatisfactory and unprofessional style of management. Accounting and bookkeeping methods are by no means uniform, and while much has been done by the Comptroller of the Currency and the several superintendents of banking to introduce uniformity of practice by enforcing the laws as to maintenance of reserves on hand, of paper discounted, and the like, such efforts have been successful only in a rather vague way. It is almost necessarily true that great differences of practice and great differences in character of personnel obtain between one of the larger city banks and the bank of $25,000 capital in the South and West.

The state of things thus indicated is naturally cor-

relative with a condition in which promotion is by no means steady or assured. Employees of capacity and ability usually make their way in all institutions, but the rank and file of the personnel of the ordinary bank may or may not be steadily advanced as experience and training seem to warrant, and in any case may find it hard to get outside their local community. The outcome of this is a rather rapid transference of employees from banking institutions to business houses, followed, of course, by the recruiting of bank staffs from outside employment as circumstances demand or require. While there is some interchange of banking employees between institutions of different cities, the amount of it is relatively small. An able officer of a country bank is likely to be a man of distinction in his community, and eventually may receive an offer from an institution in some city, neighboring or otherwise, which gives him a larger field for his activity.

It often happens, however, that such openings come to bankers on the strength of their business-getting capacity rather than on the basis of skill and quick judgment in the management of banking affairs. So much may be noted by way of background for a brief sketch of foreign practice. In the large foreign bank with many branches the endeavor is made to establish a regular basis of promotion so that men are advanced from grade to grade with corresponding increases of salary as their merits seem to require. This is rendered possible by the existence of the branch system, which permits constant training in management and gives opportunity for the testing of capable members of the banking staff by placing them in charge of independent offices where they are able to show their ability. Entrance into a banking staff thus means entrance into a professional occupation which holds out a definite career for the future, and in which advancement, while

not rapid and often not very remunerative, is comparatively certain. The result of this method of organization is to establish a much more rigid standard of professional conduct, or ethics, in banking than that which exists in the United States, where, as already remarked, banking is still for the most part on a basis of business rather than of professional ethics. There is a much smaller amount of shifting between banking staffs and those of business houses in such a country as England than there is in the United States, and a greater disposition on the part of business houses to follow the advice of the banks with which they deal than there is in this country.

Part III

NONCOMMERCIAL BANKING

CHAPTER XIX

THE INVESTMENT BANK

CONSIDERATION has thus far been given mainly to the various aspects of commercial banking which supplies business men with short-term credit to meet their current needs. Reference has occasionally been made to investment or long-term credit which furnishes funds for permanent economic improvements through such instruments as stocks, bonds, and notes. The following three chapters will present the essentials of investment banks, as well as savings banks and trust companies which may also be regarded as investment institutions.

I. DEVELOPMENT OF THE INVESTMENT BANK.

Investment bankers originated in the Middle Ages, when governments and kings received long-term loans for conducting wars and maintaining courts. Notable among the early money lenders were the Hansa merchants who supplied funds to many of the European kings and emperors, but usually with assurance of return. The ruler received a certain sum of money in the form of gold or silver bullion, and in return he gave the lender the rights over revenue derived from tariffs or taxes for a certain period of years. Loans were also extended on real property such as mines, fisheries, and forests owned by the government, and the products of the mines were applied to the payment of principal and interest. These early magnates were

also merchants, and they were able to use their own money directly in granting loans, and in this way they differed from the modern investment bankers who act as intermediaries in gathering the funds of others for making advances to borrowers. With the close of the Napoleonic wars financial supremacy shifted from Amsterdam and the Continent to London, and with this change the modern investment bank as an intermediary institution between borrower and lender was developed.

The same general evolution was repeated in the financial history of the United States. During the first quarter of the nineteenth century American states and municipalities secured whatever capital they needed from merchants. During the second quarter, the westward movement caused an extension of such internal improvements as canals and railroads, and capital for these purposes was raised mainly from investors in England and in other European countries. Securities marketed in this country consisted largely of municipal bonds which were sold, usually without public notice, to local bankers who in turn marketed them among insurance companies, savings banks, and private investors. In order to secure a better price for bonds, municipalities began to advertise their new issues and their sales were conducted on a competitive basis. Blocks of these bonds were purchased by individuals for the purpose of selling them on a retail basis, and these individuals thus performed in a small way the mediation function of the modern investment bankers.

The development of free banking encouraged the organization of many banks, and until the opening of the Civil War there was considerable investment of capital in bank stock. After the Civil War the growth of transcontinental railways led to the issue of large blocks of bonds which were absorbed by American and

European investors, whose contributions of capital made possible also the organization and development of great industrial trusts at the opening of the twentieth century.

The war changed the movement of capital between Europe and America. At first a large proportion of American railroad and industrial securities held abroad were repurchased, and later the war obligations of the European governments found a market in the United States.

II. Organization of an Investment Bank.

The modern investment bank is seldom organized in the form of a corporation, but rather as a partnership including from two to twenty members. In addition, large commercial banks have either opened bond departments or have organized separate companies which perform all the functions of investment houses.

The investment bank may emphasize certain features of its business more than others, and so its organization varies accordingly. It usually includes buying, selling, statistics and treasury departments. The function of the buying department is to investigate the various proposals submitted by corporations or other investment houses and to buy the securities if conditions warrant such action. The buying departments of large investment houses usually maintain close contact with industries in which they are interested. Also a large firm keeps itself informed through traveling representatives, who report conditions in these enterprises.

After the securities are purchased they are turned over to the selling department. This is headed by a general sales manager, who directs the work of salesmen and, at times, the operation of the branch offices. The majority of sales are made by representatives who travel through the territory allotted to them, build up

a regular clientele, and thus dispose of new issues of securities. Each salesman keeps in touch with the home office and reports regularly to the sales manager. If a salesman shows ability he is frequently placed in charge of a branch office and is allowed to participate in the profits of the business.

The sales force receives considerable assistance from the statistical department, which compiles lists of customers, securities already purchased by them, and their preferences in investments. The department aids in conducting a sales campaign by preparing circulars and press notices. This department also answers customers' inquiries for information on investments. Another important task of the statistical department is to analyze proposals submitted to the consideration of the investment house.

The treasury department is concerned with such fiscal affairs as the securing of loans from banks and the carrying of accounts of customers who purchase securities on a marginal basis or on an installment plan.

III. Classes of Investment Banks.

Investment institutions may be divided into three general groups—wholesale houses, large retail houses, and small retail, or bond, houses. The first group is composed of about a dozen large banking firms with many correspondent connections abroad. These houses undertake the marketing of the larger issues of railroads and of foreign governments, exceeding at times $100,000,000 in amount, by selling them, usually not to the public directly, but indirectly through other houses. As wholesale houses are engaged mainly in the purchase of securities, the organization of their buying department is of special importance, and so it usually retains the services of engineers, accountants, lawyers,

and other experts for the complete evaluation of the properties on the basis of which the securities are issued.

For the selling of these securities the wholesale houses in most cases associate themselves with the large retailers, who are much more numerous. These usually have their home office in New York City, in some other Eastern money center, or in Chicago, and operate in other important cities through their own branches or through partnerships and corporations which are independently organized, but always closely affiliated with the home office. The securities companies of national banks and the bond departments of trust companies are, of course, not permitted to organize branches, but instead operate correspondent offices which perform about the same activities as private investment banks. The large retailers will purchase securities for their own account directly from the issuing corporations to a limited extent only, and for relatively small amounts. In the case of large issues, the retailers will not usually assume the responsibility alone, but join with others in a syndicate or group of houses, of which each takes over a portion of the securities. As the main task of a large retail house is the disposing of securities, the sales department is the most important unit in its organization.

Large retail houses may be grouped according to the form of the securities or the nature of the issues in which they are interested. Thus there are houses specializing in bonds or stocks, or in both forms of securities. Other firms handle only such issues as government bonds, railroad, public utility, or industrial securities. While most investment banks naturally press the sale of their own specialties or issues, at the same time they will also execute orders to buy and sell other stocks and bonds either directly as members of the various stock exchanges or indirectly through brokers.

The branches and the affiliated offices of the large retailers throughout the country come into active competition with the bond houses or small retailers. These are of several classes, such as small banks and brokerage houses dealing in all kinds of securities, or handling specialties such as Standard Oil stocks, equipment bonds, and issues of local corporations. The organization of the small investment house is quite similar to that of the large retail firm, but on a more limited scale, for usually the buying and selling departments are conducted by only one person, who controls the entire business. The small bond house at times finds difficulty in obtaining high-grade securities, for those yielding a satisfactory profit are handled by the large retail houses themselves, which allow only a small commission on these sales.

IV. Functions of an Investment Bank.

As already indicated, the types of investment banks considered perform in general one or more of the following functions: (1) investigating proposals, (2) forming syndicates for underwriting, (3) selling securities. In addition, investment houses may render the public such services as advice in selecting securities, information to customers, and protection in case of failure of the corporation issuing the securities. These functions are exercised by the several classes of investment banks to a degree varying with their size or special interest. In considering the nature of these functions no particular type of organization will be kept in mind, but, instead, the discussion will apply to all types.

1. Investigation.

Investment banks, especially those of high standing, exercise caution before handling a new issue of securi-

ties, and therefore an investigation is first conducted. In the case of states or municipalities the investigation may be omitted entirely, but where it is carried out such subjects are analyzed as the taxing power of the government, the limit of its debt, and the earning ability of the population. Stability is an additional factor to be considered when the status of a foreign government is concerned. The examination of a public-service corporation such as a gas or an electric company emphasizes the extent of the franchise, the nature of the local population, the kind of industries, and public control over rates.

In the case of a large railroad issue a more comprehensive survey must be made, which, because of the expense involved, can be undertaken only by the wholesale houses. For this work it is necessary to retain the services of many experts. Engineers complete a physical inventory of the road, lawyers examine its franchises and leases as well as the legal status of securities already outstanding, while accountants verify the statements submitted by the corporation. Due consideration is also given to such general factors as the earnings of the road, the ability of the management, and the competition of other lines.

The same factors are considered in analyzing a new industrial enterprise. In this case the intensity of the investigation will depend upon whether the prospective issuer is a newly formed organization seeking funds for promotion purposes or an old-established corporation with securities already outstanding, and in need of money for the enlargement of its business. In general, investment houses handle municipal, public utility, and railroad issues to practically any amount, but only a few banks of standing are willing to take over large issues of industrial corporations. Hence some lines of industries are unable to bring their

securities on the market through investment houses of standing, and must therefore sell them directly to the public or through bankers and brokers of less-known standing. If the findings of the investigation prove favorable, the investment house may enter into one of two different business relations with the borrowing corporation. The latter may request the former either to purchase the securities outright at a stipulated price and to sell them to the public through its salesmen and branches, or to insure the sale.

2. Underwriting.

The corporation could possibly market its own securities directly and have the investment bank merely underwrite the issue by insuring the corporation that if the securities are not entirely absorbed in the open market the bank will take the remainder at an agreed price. For this service the issuing corporation pays the underwriting or guaranteeing bank a commission of from 2 per cent to 5 per cent. In the case of a large issue, a single bank may be unwilling to carry the entire amount, because of size and risk, and the bank forms an underwriting syndicate with several associates. For example, bank A underwrites an issue of $120,000,000 which a corporation wishes to sell directly to the public, and the bank forms a syndicate consisting of itself and banks B, C, D, and E. Bank A, acting as syndicate manager, underwrites to the amount of $40,000,000; B and C, $25,000,000 each; and D and E, $15,000,000 each. The corporation then offers the securities for sale, and if they are entirely disposed of, the underwriters receive their proportionate commission for insuring the sale of the issue, without being called upon to carry any portion themselves.

However, there are other ways of underwriting. For example, a purchasing syndicate may be organized to

buy and to sell the securities. The X Y Z Railroad issues $10,000,000 first-mortgage bonds at 6½ per cent at a par value of $100. A syndicate consisting of bank A as syndicate manager, and banks B, C, D, and E as underwriters, pools its resources or forms what is known as a joint account and buys the securities from the issuing corporation at a price of $97. From the time of this purchase to the final disposition of the securities, the issue must be "carried" or taken over by the buying syndicate, which must provide the corporation with an amount equal to the purchase price of the securities. Funds are usually borrowed from commercial banks or trust companies, which accept the securities themselves as collateral on this amount. The banks lend from 70 to 80 per cent of the total amount, while the underwriters furnish the remainder. When each underwriter receives a separate loan from its bank, the carrying of the issue is then said to be "divided," because each member is not liable for the borrowings of its associates, but only for its own obligation. In an "undivided" carrying, all members of the syndicate borrow jointly and are mutually liable for the full amount of the loan. As a matter of fact, the method of undivided carrying is mainly used at the present time.

The members of an underwriting or purchasing syndicate may enter into different forms of agreements regarding the liability of members in selling the securities. The liability may be either "limited" or "unlimited." In a limited liability account each underwriter is responsible only for the amount which he himself has assumed. Under an unlimited liability agreement, profits are shared and losses borne corresponding to the proportion underwritten by each member and not with the amount of securities which each has sold. As an illustration of a limited liability, bank A has underwritten $500,000, but has sold only

$300,000, and so it must take over the difference of $200,000 at the dissolution of the syndicate. On the other hand, with an unlimited liability, bank A has underwritten securities to the extent of one-tenth of the entire issue, or $500,000, and sells $600,000 of these securities. Other members of the syndicate are not as successful in their sales, therefore at the dissolution of the syndicate there is still a balance of $2,000,000. Although bank A has effected sales in excess of its subscription, nevertheless, it is compelled to take over additional securities to the amount of one-tenth of the balance, or $200,000. A purchasing syndicate usually consists of a few members only, while selling syndicates may consist of fifteen to twenty associates, or even hundreds, varying with the size of the issue.

3. Selling.

Having completed the investigation, and having settled the matter of underwriting, the investment house now begins an active selling campaign. It first compiles a careful memorandum or circular consisting usually of four pages. The first page presents such details as the amount, interest, and security of the issue, as well as the net income of the corporation over a period of years. The circular may also include a letter from the president or some other officer setting forth prospective earnings of the borrowing corporation and the future of the industry. About the time the books are opened, advertisements concerning the issue appear in leading newspapers. If the issue is oversubscribed, the securities are allotted in reduced amounts. Thus, if there is an oversubscription of 25 per cent, a subscriber who has applied for one hundred shares will receive only seventy-five. During the life of the syndicate, members must sell the securities only at the agreed price, and every effort is made to prevent outsiders from

undercutting this price. However, syndicates are only temporary organizations, for they pass out of existence after the disposal of the securities, which are then traded at fluctuating rates. If the securities are not sold within the stipulated time, the members may either prolong the life of the syndicate or dissolve it and divide proportionately the securities among the members who may dispose of their shares at any possible price. Securities are thus at times carried for a considerable time, and in such cases underwriters may endure heavy losses.

Even after the sale of the securities, the investment house often continues to take an active interest in the issues which it has floated. It will protect customers to whom it has sold the securities, and as far as possible will support the market. When large issues are involved, the investment house may seek representation on the board of directors in order to exert an influence over the policy of the corporation.

V. Services of Investment Banks.

Through the operations considered above, investment banks perform important services for both borrowing corporations and the investing public. To the former it furnishes fluid capital at a reasonable cost, and to the latter it offers opportunities for a satisfactory return on surplus funds.

Valuable aid is also rendered by investment houses to the borrowing corporations, in time of reorganization and failure, especially when due to causes over which their management has no control. Investment banks are then the only sources for new capital, as the public is unwilling to buy the securities of a corporation in default, and only those banks which are able to investigate the entire situation and appreciate the true value

of the corporation's assets are willing to provide new funds.

An investment bank of standing aims to sell its clients securities of reasonable yield and safety only. At times, the selection is not always justified by economic events, and it is then policy to advise customers to sell these securities if the yield has become unsatisfactory and the value speculative. In order to maintain its reputation, an investment bank will sometimes go to the extent of paying interest to holders of bonds on which the issuing corporation has defaulted.

CHAPTER XX

SAVINGS INSTITUTIONS

I. The Savings Bank as Compared with Commercial and Investment Banks.

Before describing the various classes of financial institutions for the accumulation of savings, it is well to consider first the general meaning of savings banking as compared with commercial banking, especially as relating to deposits and loans. While the depositors of commercial banks are usually business men, the clients of savings banks are mainly working people who desire a secure depository for their earnings. The deposits of the former result largely from the granting of loans and contain a relatively small proportion of cash, which, on the other hand, constitutes the main element in savings deposits.

The funds of savings banks possess many of the features of time deposits of commercial banks, since both are lodged with the banks for the purpose of obtaining an interest yield. This return can be granted by the banks, because both savings and time deposits are generally inactive, and, moreover, may not be withdrawn immediately upon demand, but only upon due notice of from thirty to sixty days in advance. A characteristic of the savings deposit is the insistence by the bank that the customer produce his pass book before making any withdrawal.

As the savings bank thus deals in long rather than in short term credit, it partakes of the nature of an invest-

ment institution. The savings bank and the investment house are similar in that they both act as intermediary agents between investors and borrowers. The difference lies in the fact that the investment bank sells securities directly to the lenders, while the savings bank operates indirectly by receiving deposits and placing them in investments. In the first case, investors secure their returns in the form of dividends or interest from the borrowers, while depositors receive interest from the bank.

Since a savings bank is not required to pay out deposits on demand, it is able to make loans for a longer period of time, as compared with the commercial bank, because the latter holds, for the most part, deposits payable on demand, and so can extend only short advances. The savings bank invests largely in real-estate mortgages, railroad and government bonds. The bank is not entirely free in selecting these investments, for they are more or less prescribed by state law. Such legislation is due to the general belief that savings deposits are entitled to additional protection and should therefore be placed only in special investments which offer adequate security. An individual possessing surplus funds has the choice of investing them in securities directly, or in securities indirectly by depositing in a savings bank. By following the former policy, the saver gains the advantage of a higher yield, but at the same time labors under certain disadvantages. For instance, he does not possess sufficient knowledge of the investment field to judge relative values and to discriminate between high-grade and low-grade securities. His savings are usually accumulated in amounts too small for their immediate placement in stocks and bonds, which are seldom issued in denominations of less than $100 each. To some extent this objection to direct investment of small savings is overcome by

the plan of certain brokerage houses of accepting partial payments on securities purchased, and of certain companies in issuing real-estate mortgage bonds in amounts as low as $100. Even if the saver were in position to find investments which are safe and of small denomination, he would still be unable to diversify the risk. The soundest investments are subject to fluctuations in value, and losses can be overcome only by a proper distribution of funds. This is impossible for the individual with limited capital, and thus he cannot avoid loss if the investment in which he has placed his savings depreciates in value. The problem of marketability also remains, and a contingency may arise in which the individual needs cash immediately and he may then be forced to sell his investment at a sacrifice.

These disadvantages encountered by the man of moderate means who follows the method of direct investment are overcome to a large extent by creating a savings account. In the first place, the bank has a better understanding of investments, for it is continually placing funds on a large scale and is therefore able to secure expert advice. Secondly, no saving is too small to be accepted, for some banks take a single deposit as low as ten cents. It must be remembered that the savings bank is receiving numerous deposits, small in their separate amounts but large enough in the aggregate to enable the bank to spread its investments over various fields of business interests. This very diversity brings security, for a loss on one investment is compensated by a gain on another. Lastly, the savings bank gives the depositor the assurance that his funds are available practically on demand and with no loss excepting possibly an amount of interest which has accrued between the dates of deposit and of withdrawal. For these reasons the savings bank per-

forms a distinct service to the individual, who is thus encouraged to practice thrift and to lay aside funds for later use.

The savings bank meets a social need in furnishing capital for the use of borrowers. The savings of the community are accumulated and made available for the building of homes, the construction of railroads, and the undertaking of other worthy enterprises.

II. The Organization of a Mutual Savings Bank.

In the above description of the nature of the savings bank, it has been conceived as a single institution, but it is organized in various forms, of which the most important is the mutual savings bank.

The mutual type was the original bank for savings and the first was organized in England in 1810. During the early half of the nineteenth century similar banks were established in New England and New York, but the movement did not extend beyond the Northeastern states. In this area on June 30, 1921, the total deposits of mutual savings banks amounted to $5,575,181, 000. These resources have a special significance in finance, since they represent not extensions of credit by banks, but deposits of actual funds by customers.

The purpose in organizing a mutual savings bank has been philanthropic rather than commercial. Originally these institutions were established for the purpose of encouraging thrift among the poorer class and of improving their welfare. The founders were actuated by charitable motives and were not expected to derive any profit from the undertaking. This theory is still applied in the case of the mutual savings bank, for it is organized and operated by a group of persons known as trustees, who are forbidden by law to receive any

compensation for their services. In fact, the organizers must contribute to an initial fund to meet the expenses of starting the new bank and to operate it until earnings render it self-supporting, at which time the contributions are returned.

The mutual savings bank is not operated through capital derived from the sale of stocks, for the business is conducted through funds left by depositors, who are the real owners of the bank. Thus the income which they receive is technically called a dividend, but because of its certainty of payment and stability of rate it is popularly regarded as interest. Although they are in a sense the owners of the mutual banks, the depositors exercise neither control over the management nor choice in the selection of the trustees. The first trustees are appointed by the original organizers and later additional trustees are elected by the board itself, thus constituting it a self-perpetuating body.

The trustees of a large mutual savings bank are divided into committees with duties quite similar to the directors of a commercial bank. The finance committee passes upon all applications for loans on mortgages and approves all purchases of securities. In New York State, a trustee may not receive a loan from the bank. An auditing committee examines the books of the institution and verifies all receipts and disbursements, while appointments and discharges of employees are made by a personnel committee.

The duties of the higher officers are about the same as in a commercial bank. The president, as a member of the board of trustees, presides over meetings. As chief executive he manages the bank, and in this task he is aided by one or more vice-presidents. A treasurer performs duties similar to those of a cashier in a commercial bank. He has custody of cash, securities, and other property of the bank; he also records the

minutes of trustee meetings, keeps the bank ledgers, conducts correspondence, and in general directs the work of the staff. In a large bank the treasurer is relieved of these purely clerical duties, which devolve upon a secretary. The work is sometimes divided further by transferring the keeping and the auditing of the books to an officer known as the comptroller.

As the operation of the savings bank is much simpler than that of the commercial bank, there are fewer departments. There is no need for an exchange division, since savings banks do not present checks on one another. The departments deal principally with deposits and investments. One department concerns itself exclusively with the opening of new accounts. Deposits and withdrawals are handled by a receiving and a paying teller; another department has charge of loans on mortgages and investments in securities, and a head bookkeeper supervises the work of the ledger clerks. In general, the bookkeeping of a savings bank does not present the many difficulties found in a commercial bank, and the handling of deposits and the making of investments possess the only distinctive features which need consideration in detail.

III. Deposits of Savings Banks.

Savings banks carry single-name, joint, trustee, and society accounts. Most important is the single-name account, opened by an individual in his own name, and he alone has control over deposits and withdrawals. A joint account is owned by two persons, and either one may draw the funds. A trustee account is opened by one person in favor of another, but it is payable solely to the trustee himself, and only after his death are the rights of the beneficiary recognized by the bank. A treasurer may deposit the funds of a lodge or church

organization in what is known as a society account, and from it he can withdraw money as the official representative. All accounts are usually restricted to a maximum limit, which in New York State amounts to five thousand dollars, since savings banks are intended only for persons of moderate means.

An account with a savings bank is opened in a manner somewhat different from that in a commercial bank. As the former bank will not extend loans to the prospective customer, there is little need of an introduction or of an investigation into his credit standing. The only relations between customer and savings bank will consist of leaving and withdrawing deposits, and to enable the entering of these transactions several records must be compiled. The new customer fills out a signature card which requires such information as his age, date of birth, residence, occupation, name of parents, and general facts relating to his family history. This card supplies the paying teller with test questions which will later be used in identifying the depositor when he wishes to withdraw money.

IV. The Pass Book.

With the account thus opened, the depositor receives a pass book which from his standpoint is the most important of all savings-bank documents. It serves (a) as a contract between customer and bank, (b) as a miniature ledger of all deposits and withdrawals, and (c) as an instrument which is assignable. The pass book contains a statement of the regulations governing both depositor and bank. In general, the former is regarded as a creditor who has given a sum of money to the latter, who thus becomes the debtor. The bank promises to exercise due care in investing this fund, while the client, on his part, consents to follow certain

rules relating to the making and withdrawing of deposits, and in all these transactions he agrees to present his pass book.

The importance of this instrument can best be seen by tracing the manner in which a savings bank receives and pays deposits. A deposit usually consists of cash, but occasionally checks are also offered. To be acceptable these checks must be drawn directly to the order of the bank, or to the order of the depositor, and then properly indorsed by him. The items thus presented are entered on a deposit slip which is usually filled out by the customer himself, but if he cannot write, a clerk of the bank is permitted to complete the record. The customer then presents the deposit, the slip, and the pass book to the receiving teller, who enters the amount in the pass book.

While the savings bank thus receives the deposit in much the same way as in the commercial bank, a withdrawal is more complicated, because special care must be taken to safeguard the interests of savings depositors. As they do not withdraw their money regularly, the paying teller has little opportunity of knowing them personally. Besides, they are often foreigners or individuals with little knowledge of business, and are therefore less able to protect themselves against fraud.

In withdrawing money from a savings bank, the customer signs either a check or a receipt. The check is quite similar to the ordinary instrument used in drawing against a commercial account. This withdrawal order may read as follows:

To the X Savings Bank

Pay to myself or order the sum of
one hundred dollars
and charge my pass book Number 10

A receipt for the payment of savings funds is filled out by the bank clerk and then signed by the customer. This form contains simply a statement which reads:

Received from the X Savings Bank
on account of pass book Number 10

The checks and the receipts used in large savings banks are often printed in even denominations of $5, $10, $50, or $100 for the convenience of customers. The signature is compared with the specimen previously written by the depositor when he opened the account. In the event of forgery the savings bank is not liable to the same degree as is the commercial bank. It will be recalled that the latter is fully responsible if it makes payment on a forged check. However, the savings bank is not compelled by law to know the signature of its customers. A surer means of identification than test questions or even a signature of the depositor is his fingerprint. This method is based on the well-known principle that the lines on the finger tips are formed differently in almost every individual and thus he can easily be identified. Savings banks are now applying this test, especially to depositors who are unable to write. When the customer has met this test, the amount of his withdrawal is recorded on the bank's ledgers and entered in the pass book.

While the bulk of deposits and withdrawals are made in person over the counter, these transactions can also be conducted by mail. In this way the bank receives deposits of cash, checks, and money orders, and also complies with the requests of customers for payment by sending them drafts. In every case the pass book must be forwarded to the bank.

Because of the care taken to enter all deposits and withdrawals in the pass book, it always represents the net balance which the bank owes the depositor. He is

therefore able to use his book as an instrument assignable to another person. The pass book can be used when the depositor buys property from a seller, who in exchange receives title to the funds in the savings bank. A depositor can also use his pass book for the purpose of pledging it as collateral for a loan.

Due to the importance of the pass book, the bank exercises utmost care in issuing a duplicate when the original is lost by the depositor. He is expected to give immediate notice of such loss to the bank, which then stops further payment against the account. An advertisement describing the book is usually inserted in the newspapers at the customer's expense. If the account is large, the bank may further require an affidavit in which the depositor attests to the loss, and may even exact a bond of indemnity covering the bank to twice the amount.

In the case of most savings accounts, deposits about equal withdrawals, and the increment from year to year results from the amount of interest paid by banks to their customers.

The savings bank pays interest not on the average balance, but on the lowest amount which remains to the credit of the customer within a limit of time. If before the end of this time the customer withdraws any portion, he loses the interest on that amount. Interest is usually computed from the 1st of January and July, but some banks grant it from the beginning of each month. There is a recent tendency to shorten the reckoning of interest to one month. This method possesses certain advantages in that it renders the business of the bank more uniform by spreading the interest payments over the entire year, and it encourages systematic saving among customers who otherwise are inclined to withhold deposits until the beginning of the interest period. To the bank, however, the monthly

plan usually brings a net loss, for profits tend to decline directly with decrease in the period of interest payment. This is due to the fact that a bank has at its disposal a large amount of money bearing no return to the depositor until the next interest date, but these funds at the same time serving as an earning asset to the bank itself.

V. Investments of Savings-banks.

The second phase of savings-bank operation is the investment of funds intrusted by depositors. In investing these deposits a policy should be followed which assures the ends of safety, diversity, liquidity, and productivity. Safety should be the prime consideration, for the bank is obligated to maintain intact the savings of its depositors. This security is partly obtained by diversifying or distributing investments over more than one interest and in more than one locality. It is also highly essential for a bank's investments to possess liquidity, so that they can be readily sold on the market, and the funds made available to meet any sudden demand of depositors for their money. Productivity is desirable, for a bank naturally seeks a high income on its investments in order to pay a reasonable yield to customers on their deposits.

Minor influences sometimes determine the investments of savings banks. They are expected to give preference to local interests, so that the savers are directly or indirectly the users of the money. On this theory that the depositors' funds should be "kept at home," savings banks in general invest a considerable part of their funds in mortgages based on property near by, and in bonds issued by governments in the same locality.

The savings bank is by no means free in selecting

its investments, for these are usually prescribed by state laws. They embody to some extent the above principles of investment, but the statutes represent rather the historical evolution of the state's judgment on legal investments for savings banks. The mortgage on real estate has always been regarded as a desirable form of investment, and government bonds are also considered satisfactory. The buying of nongovernment securities was not permitted until the end of the nineteenth century, when some of the states first permitted the purchase of railroad issues. Savings banks were thus limited to investments with long maturities, and only in recent years have they been free to lend their funds on short-term obligations such as collateraled promissory notes and bankers' acceptances. In general, there has been a tendency, especially in Massachusetts and New York, to widen the sphere of investments for savings banks.

In analyzing the relative importance of these various investments, particular consideration will be given to the regulations as found in the savings-bank law of New York.

1. Real-estate Mortgages.

In that state the mutual savings banks have invested about one-half of their funds in real-estate mortgages. When a prospective borrower wants a savings bank to advance him a loan on the pledge of his real estate, he first fills out a formal application describing his property. It is then evaluated or appraised by a committee of the trustees, for the loan must not exceed 60 per cent of the value of the property if improved, and not over 40 per cent if unimproved. In estimating the worth of the property, such factors are considered as the cost of construction, the further upkeep, and the income derived from rentals. In examining city prop-

erty, due consideration is also given to desirability of the neighborhood and extent of transportation facilities. In appraising a farm, quality of the soil, kind of crops, condition of buildings, and nearness to markets are carefully studied. If the report is favorable, the title to property is searched by an attorney or a title company. An abstract is made of the title, from which the bank learns whether the owner has a clear or undisputed right to the property and whether it is free from prior taxes or other claims. The property is then insured against fire, so that payment, in case of loss, is made in favor of the bank as mortgagee. The bank closes the transaction by recording the mortgage in the office of the local government and by sending the borrower a check to cover the loan. While a savings bank in a city rarely extends mortgage loans on distant property, country banks lend quite freely in New York and other large cities because of the scarcity of local loans. Economic conditions and likewise real-estate values are more stable in the country, where the character of the neighborhood changes but slowly and where improvement in transportation seldom alters a community for better or for worse. Although rural property possesses stability, it usually has restricted salability. In this respect, an urban lot and building possesses an advantage, since a buyer can be found more readily. In general, limited marketability is the fundamental weakness of all real estate as collateral, especially when contrasted with government or railroad bonds. These are issued in series of large numbers, of which each bears the same value as any of the others and so possesses a relatively uniform market price to all buyers. However, each building or plot of ground possesses features peculiar to itself and stands as a separate unit. Such property has, therefore, no definite market, but is sold according as it

appeals to the particular wishes of the individual buyer.

Under these conditions real estate at times becomes a collateral from which a bank finds difficulty in realizing its money. It sometimes happens that a borrower who has given a piece of property as security for a loan is unable to repay the money. Through the legal process of foreclosure the property is placed at auction, and if no buyer appears the bank must purchase it in order to escape loss. This situation is unsatisfactory to the bank, especially if it is unable to dispose of the property at a time when funds are needed to meet the demands of depositors for cash. To avoid this embarrassment the bank may have a mortgage guaranteed by a realty company, which for a small charge assumes entire care during the life of the loan and assures the payment of the yearly interest and final principal. This practice is especially favored by country banks investing in mortgages on city property. A bank may lessen the number of foreclosures on property held as security by insisting upon the amortization of the loan. Under this plan the borrower pays off a certain portion of the loan at the end of every year or a shorter interval. Thus at maturity the loan is entirely liquidated or at least the principal is considerably reduced.

2. Investment in Bonds.

Because of the difficulty encountered in disposing of their mortgage holdings in time of need, savings banks invest heavily in bonds, which possess great liquidity. The savings banks are usually permitted by law to hold the obligations of such governments as (1) the United States, (2) the state in which the bank is located, (3) any local subdivision thereof, (4) any outside state or city meeting certain tests of safety, such as adequate

population, limit of indebtedness, and a satisfactory record in honoring its obligations in the past. A few states permit savings banks to purchase bonds issued by the more stable European governments.

The investments of savings banks in nongovernment securities are usually limited. The purchase of stocks is generally prohibited, and in some states even bonds of industrial and public-service corporations are forbidden. Savings banks in New York State must confine their nongovernment investments exclusively to first-mortgage bonds of a selected list of railroads. These bonds, especially if listed on the Stock Exchange, can readily be sold by the bank if it is in need of cash, but until the middle of 1921 this advantage was offset by the weakness of bond values. These declines were caused not by any doubt as to payment of interest or principal, but by the low yield as compared with the high rate of the money market. Nor was there any opportunity to adjust the yield, for these securities usually had a long maturity.

3. Short-term Investments.

It is therefore necessary for a savings bank to place some of its funds in a form which possesses both stability of value and marketability. A checking account may be maintained with a commercial bank, which must repay part or even the full amount on demand, but such funds yield only a small rate of interest. In order to secure a satisfactory yield and at the same time retain the necessary liquidity for their holdings, savings banks are usually permitted to invest in obligations with short maturities. In New York State, loans may be made on a demand promissory note signed by a borrower, who hypothecates such securities as the savings bank itself is permitted to purchase, but the loan

in any case must not exceed 90 per cent of the market value of this collateral. Savings banks are thus able indirectly to lend in the call-money market at a satisfactory rate through a commercial bank which directly places the funds and in return gives its demand note secured by Liberty Bonds. A savings bank may also lend on a ninety-day promissory note of a borrower who pledges as collateral either a pass book of another savings bank or a class of mortgage in which the bank itself may invest. The loan must not exceed 90 per cent of the amount entered on the pass book, or 75 per cent of the value of the mortgage.

A greater liquidity has been added to the assets of savings banks by the passing of state laws which permit the purchase of bankers' acceptances. These must be of a kind eligible for purchase in the open market by a Federal Reserve bank, and thus a savings bank may count such holdings as a secondary reserve which can be readily converted into cash.

The investments of savings banks have varied in their distribution during the past decade. Notwithstanding the urgent need of additional buildings to meet the housing problem in the large cities, the proportion of loans made on mortgages has declined, because the rate of interest on such loans has been limited to 6 per cent by the state laws against usury. Railroad, municipal, and state bonds have lost favor, for until recently their yield has been comparatively low. Savings banks have transferred their funds largely from these securities to Liberty Bonds, Victory Notes, and certificates of indebtedness, which have yielded a greater return and which at the same time have furnished the highest possible security. Acceptances bearing a satisfactory return and offering a quick salability have also attracted no inconsiderable amount of savings-bank funds.

VI. Classes of Savings Banks.

In addition to the mutual savings bank just considered, there are several other forms of savings institutions to be found in the United States, such as, (1) stock savings bank, (2) savings department of a commercial bank, (3) guaranty-fund bank, and (4) co-operative association. In addition to these institutions, which are operated by privately owned capital, there is also the postal savings system conducted by the federal government. In several European countries savings banks are also operated by municipalities.

1. Stock Savings Banks.

The mutual savings-bank plan has not extended to the West and the South, where savings institutions are formed not for philanthropic purposes, but rather for profits, and are therefore organized the same as other corporations. They are called stock savings banks, and their earnings are paid to shareholders, while depositors receive a fixed rate of interest. The stockholders also possess the right to elect directors, who control the affairs of the bank. Hence mutual and stock savings banks differ as to motive, ownership, and management. Both types possess the common feature of receiving only savings accounts and neither enters into the field of commercial banking.

2. Savings Departments of Commercial Banks.

Many institutions, especially in the West, combine both saving and commercial banking. Savings deposits at times exceed checking accounts in amount, but as a rule these banks engage essentially in commercial business and only incidentally operate a savings department. At first trust companies and later state banks were allowed to receive savings deposits in addition to carrying commercial accounts. National banks re-

frained from accepting savings deposits, for it was believed that this power was not granted under the National Bank Act. In 1903 the Comptroller of the Currency expressed the opinion that while a national bank was not specifically authorized to accept time deposits, nevertheless this step was not expressly prohibited by the National Bank Act. The question was definitely settled in favor of the national banks by the Federal Reserve Act, which recognizes a savings department in Section 19, defining deposits as follows: "Demand deposits within the meaning of this act shall comprise all deposits payable within thirty days, and time deposits shall comprise all deposits payable after thirty days, all savings accounts and certificates of deposit which are subject to not less than thirty days' notice before payment." This definition has practically the same force as an authorization to accept savings deposits, and accordingly many national banks now operate such departments.

3. Guaranty-fund Banks.

Another type of savings institution is the guaranty-fund bank which prevails in New Hampshire. It combines several of the essential features both of the mutual and of the stock banks. In common with the mutual type, the guaranty bank handles no commercial accounts and its funds are derived from savings deposits. The distinctive feature of the guaranty bank arises from the division of its deposits into general and special. The general deposits bear a definite rate of interest, and therein are unlike mutual savings-bank accounts, whose yield is a dividend dependent upon earnings. After interest has been granted on the general deposits in the guaranty bank, the remaining sum is paid on the special deposits. These serve as a guaranty fund for the general deposits in the event of

nonpayment of interest or principal. In return for higher earnings, the special depositors assume a proportionately greater risk. In a way, general deposits of the guaranty bank resemble preferred stock of a corporation, and special deposits may be compared to common shares.

4. Co-operative Associations.

The co-operative savings institutions, such as building-and-loan associations and the credit union, have been described in Chapter III.

5. Postal Savings System.

The postal savings system aims to encourage thrift by offering a secure depository for savers through the mechanism of the government post office. This was the subject of active discussion following the close of the Civil War, and met with considerable opposition. Proponents of postal savings believed that the government post-office stations would become feeders of the banks by directing public attention to the importance of thrift. They also claimed that it would attract funds ordinarily hoarded by immigrants and others through mistrust of privately owned banks. This contention received added strength in 1907, when the panic caused heavy withdrawal of savings deposits.

Finally, in 1910 Congress passed the Postal Savings Act. It provides for a board of trustees consisting of three Cabinet officers (the Postmaster-General, Attorney-General, and the Secretary of the Treasury). They are empowered to designate post offices as depositories of savings, and in general to administer the system. The Act regulates deposits rather narrowly. They are to be received from individuals alone, and only one account can be held by a person at any time. At first the balance was limited to $500, but later the

maximum was raised to $2,500. A saver receives not the usual pass book, but a certificate of deposit, which is nontransferable and nonnegotiable. The interest rate on all deposits was fixed at 2 per cent, thus differing from the principle of savings banking, which varies the rate according to earnings. These savings funds are invested in United States government securities or redeposited in state or national banks paying 2¼ per cent on such daily balances and offering satisfactory municipal or other public bonds as security.

In general, the total postal savings deposits have declined and many of the offices have been discontinued. One cause has undoubtedly been the low rate of 2 per-cent, which has not appealed to savers in a period of rapidly rising interest rates and high yielding government war bonds. The lack of progress of the postal savings system may be attributed to the increased facilities offered by the growing number of savings departments in national banks.

Postal savings banks have been established in England, France, Italy, and in about forty other countries. Elsewhere in Europe public banks have been conducted by municipalities. In Germany, where no postal savings system exists, banks for savings are operated by almost all the large cities. Local governments have not entered the field of banking in the United States, where a more restricted theory regarding the function of the municipality is held.

Having studied the various forms of private and public savings institutions, it is evident that not all of them are adapted to the economic conditions existing in the United States. Public savings banks, whether federal or local, have made little or no progress. Nor have all privately owned savings institutions flourished, for no rapid advancement has been made either by the co-operative associations or by the stock savings banks

accepting only savings deposits. Progress has been shown only by stock banks holding both commercial and savings accounts, and nonstock or mutual banks receiving only savings deposits. While the changing economic conditions since 1914 have affected the amount of these savings deposits, they were considerably augmented during the wave of prosperity in 1919, and they were not impaired by the depression in 1920 and 1921. However, savings institutions to-day face certain problems which will be briefly considered.

VII. Recent Developments Among Savings Institutions.

There is an ever-growing competition between mutual savings banks and commercial banks with savings departments. As a result of the struggle for savings accounts, the interest rate has often been forced to a high level. In general, commercial banks have been able to outbid the mutual savings banks, as the latter's investments are restricted by law and their earnings consequently limited. It must also be remembered that mutual savings banks are not operated for profit; hence trustees at times lack this incentive to adopt methods for securing new business. Nevertheless, many of the mutual banks are now following a more progressive policy in order to gather new accounts. Such services are offered as the holding of Liberty Bonds for persons who cannot afford to rent safe-deposit boxes. In Massachusetts, some savings banks conduct insurance departments for the issuing of policies. Mutual banks have practically waived the right of notice before the withdrawal of funds, and thus savings deposits are virtually payable on demand.

In order to meet this change in the nature of savings deposits, it has likewise been necessary to shorten the

maturity of certain investments, so that they possess greater liquidity. It has even been proposed to admit mutual banks to membership in the Federal Reserve system. This plan is not feasible, since mutual banks have no capital stock, and cannot as members subscribe to shares in the Federal Reserve banks; also, as they seldom hold eligible paper, they cannot well take advantage of the rediscount facilities.

CHAPTER XXI

TRUST COMPANIES

I. Nature of a Trust.

Before considering the subject of trust companies, it is necessary first to understand the nature of a trust. For example, A surrenders certain property to B with the understanding that the former retains full benefit of the property, while the latter holds a kind of ownership over it. The first party has such faith that he yields the title of his property over to the second party, who in consequence assumes an obligation which is described as a trust. The party who receives the ownership is known as the trustee, and the giver is called the trustor. He may at the same time be the beneficiary who derives the income or the use of the property in trust. More usually, the beneficiary is a third party—for example, a son for whose education the father creates a fund to be administered by some friend acting as trustee in accordance with the terms of a formal agreement. This illustration indicates all the essential parties and factors in a trust, namely: beneficiary, trustor, trustee, property in trust, and statement of the terms under which this property is to be assigned, administered and finally disposed.

II. Individual and Corporate Trustees Compared.

There are individual or corporate trusts, depending upon the nature of the trustors who have created them.

Trustees are not necessarily real persons, for corporations may be designated in this capacity. In fact, there are distinct advantages in having an incorporated organization act as trustee. As a chartered body, it has a continuous existence and so is not subject to the uncertainties which beset the life of an individual. A person's financial strength is inferior to that of the corporation with its capital, surplus, and other resources. Another element of greater safety lies in the fact that the corporation is under close regulation and periodic examination by the state which grants its charter. The corporate trustee can also offer to its clients the benefits arising from the economy of large-scale business. While an individual may be called upon to act as trustee only once in his lifetime, a fiduciary corporation administers trusts daily and so accumulates a vast fund of specialized experience. Because of the volume of its business, a corporate trustee is able to retain the services of experts in investments, law, and other fields of technical knowledge. The judgment of a corporation in dealing with intricate family matters will not likely be influenced by personal feelings which may affect the individual trustee. However, this impersonal nature of the corporation may at times prove a limitation in administering trusts which require sympathetic care. The relative merits of individual and corporate trustees depend largely upon the nature of each particular trust, but the latter is generally regarded as superior because of its permanent existence, financial strength, government supervision, large-scale business, and specialized staff.

As the executing of trusts involves large sums of money, it is quite natural for a trust company in time to develop a banking business. Conversely, a bank with its financial strength is well fitted to administer fiduciary affairs. So, on the one hand, trust companies

have entered the field of banking, while banks in turn have invaded the fiduciary business by opening trust departments. This chapter will consider next the development of these movements, then the administration of individual and corporate trusts, and finally government regulation of fiduciary institutions.

III. Development of Trust Companies.

As indicated above, the essential feature of a trust is the separation of the use of certain property from its ownership and the division of the use and ownership between two different parties. This concept can be traced back to the thirteenth century, when the decline of the feudal system was vitally affecting the legal view of property rights in England and on the Continent. Although trusts have existed in Europe for several centuries, the trust company is a distinctly American institution, and its history covers a period of only one hundred years. The first trust company was organized in New York City when the state granted a charter to the Farmers' Fire Insurance and Loan Company (later the Farmers' Loan and Trust Company). As the name implies, this corporation was engaged primarily in the business of insurance, but under its charter it was also permitted to execute trusts. Several years later the New York Life Insurance and Trust Company was incorporated with similar powers. Until the outbreak of the Civil War not more than half a dozen trust companies had been organized in the United States. Moreover, their activities were limited both by legal and by economic conditions. Trust companies were usually prohibited from receiving deposits or from conducting any other form of banking business. It must also be remembered that prior to the Civil War, the medium of paying business obligations was not the check drawn

against a deposit account, but the note issued by a bank. This operation of circulation could not well be conducted by a trust company. Its fiduciary business was confined mainly to trusts created by individuals, as few business corporations were in existence before the middle of the century.

After the Civil War, new economic conditions exerted a great influence over the nature of the trust company and expanded its powers considerably. This tendency is well represented in the charter of the Rhode Island Hospital Trust Company, which was permitted to execute trusts, accept savings deposits, and exercise all banking powers, with the exception of issuing notes for circulation. With the close of the Reconstruction period and the beginning of industrial expansion during the last quarter of the nineteenth century, there was a rapid accumulation of great private fortunes and widespread growth of large corporations. These tendencies resulted in widening the operations of trust companies, which now conducted safe-deposit vaults for storing the valuables of wealthy individuals, and opened departments for rendering financial services to corporations. New forms of trusts were created with the development of corporate finance during the first decade of the twentieth century, and the extraordinary conditions arising from the war further stimulated fiduciary relations. The growth of trust companies in recent years is evidenced by the fact that the combined resources of all trust companies in the United States amounted to $705,000,000 in 1895, while, in 1915, their assets amounted to $6,000,000,000, and by the middle of 1921 the total aggregated $12,323,000,000.

During this century of development, the operations of trust companies have been considerably changed. In the first place, their original insurance business was gradually abandoned. The passing of these operations

may be attributed in part to legislative acts which prohibited trust companies from writing fidelity policies. Moreover, economic tendencies encouraged the growth of corporations specializing only in insurance. With the evolution of this business, it was soon apparent that a concern dealing in one form, such as life insurance or real-estate title insurance, could operate more inexpensively than a corporation which attempted to carry all classes of risks. The loss of this insurance business was compensated by the assumption of new fiduciary powers, including, in time, the administrating of corporate trusts. In addition, trust companies received deposits, granted loans, and finally exercised general banking powers. In consequence the modern trust company may be regarded as a bank which exercises fiduciary functions.

IV. Growth of Trust Departments of Banks.

As trust companies entered the field of commercial banking, they came into direct competition with national banks. These institutions began to appreciate the advantages of conducting a fiduciary business which yielded profits and at the same time attracted customers to the other departments of the bank. Trust powers were not directly granted by federal law, but a national bank was able to overcome this omission by purchasing a majority interest in the stock of a trust company incorporated under state law. This tendency to combine commercial banking and fiduciary business was given official sanction by the Federal Reserve Act, which in Section 11–K authorizes the Federal Reserve Board to confer certain trust powers upon national banks applying for them. This counter invasion by the national banks into the province of the trust companies stirred vigorous opposition. The ques-

tion arose as to whether the Federal Reserve Board could grant national banks fiduciary powers if these were conferred by state law upon trust companies only. After consideration by state judiciaries, the Supreme Court of the United States declared that Congress was fully within its rights in granting trust powers to national banks. However, this decision recognized a state's prerogative to impose upon national banks exercising trust powers the same regulations which governed local corporations engaged in this business. Congress accepted this view and incorporated it in an amendment to the Federal Reserve Act.

It has been observed several times that there is now little difference in the business of a large trust company and that of a national bank. They both engage in commercial banking, receive savings deposits, operate a bond department or conduct a separate investment company, and exercise trust functions. The nature of commercial, savings, and investment banking has been already considered, and fiduciary business alone remains to be studied. This analysis will not consider specifically the operation of either a trust company or the fiduciary department of a national bank, but rather will examine the administration of each of the more important trusts, whether executed by state or federal institution.

V. Individual Trusts.

1. *Voluntary.*

A trust company can render a variety of service to the individual during his lifetime, and to his estate after his death. If the fiduciary relation is effective while the individual still lives, the company is said to act as trustee under deed or agreement which creates what is called a voluntary, or personal, trust. A

testamentary trust designates the company as trustee under will, and operates only after the death of the donor. A testamentary trust can be nullified by merely writing a new will, which takes precedence over the old one.

A voluntary trust may or may not be revocable in form. If revocable, the creator retains the right at any time to add amendments to the trust, or terminate it altogether. An irrevocable trust is placed beyond the power even of the maker himself, for he cannot change the provisions unless the parties interested as beneficiaries give their consent to an alteration or cancellation. An individual can create a trust of which the beneficiary may be an institution, another third party or person, or even the trustee himself.

A variety of conditions may induce a person to assign his property as a trust. He may be actively engaged in business, and therefore without sufficient time to care for the detailed administration of the property; he may wish to retire and relieve himself of business cares; or he may plan to travel, and during his absence his financial affairs need attention. Under these circumstances the owner of personal property, as stocks and bonds, could simply place them in a vault for safe keeping. But such property requires continual attention, and this service may be performed by a trust company, which guarantees not only the physical safety of the securities, but also assures proper care, such as collection of dividends, preparation of income-tax statements, and gathering of market information. The securities may be sold without requiring the presence or even the signature of the owner, if he transfers the title to a nominee, who is usually a clerk employed by the trust company. The corporation assumes full responsibility for the actions of this nominee, who has no claim to actual ownership. This legal fiction is

quite necessary in administering these trusts, for if the securities were indorsed in the name of the company a special authorization of its board of directors would be required for each sale.

A trust company also manages real estate, and as agent has all the duties and rights of the landlord himself. In this capacity the trust company pays taxes and insurance, receives rents, and grants leases.

The beneficiary of a trust may also be a person other than the trustor. The property is not granted as a gift, but is held in trust for the recipient, who may be disqualified from outright ownership for such reasons as inexperience or legal incapacity. Thus provision can be made for the education of a child or the support of wife or other dependent relative who lacks business knowledge. A trust company may be appointed as guardian of a minor, or conservator for an insane person. The law regards such persons as incompetent and a trust company may conduct their affairs until the beneficiary either attains his full age or regains his reason.

The private trusts thus described continue during a definite period of time, or indefinitely until the occurrence of an event such as the death of the beneficiary. Only public trusts can be created in perpetuity. These charitable trusts are established for the benefit of religious, educational, or scientific institutions. In this manner a trustor provides an endowment for foreign missions, a scholarship in a university, or a fellowship for scientific research.

2. Testamentary.

A trust company may also be called upon to administer a testamentary trust. This is created by a will, which is a declaration signed by the testator or maker for the disposition of his property after death. The

provisions of the will are carried out by an executor who is specified in the will. In the past it has been customary for one to appoint a friend, business associate, or counselor as his executor, but there is a growing practice to nominate a trust company, especially for administering large estates. The executor deposits the will in the surrogate's court, where it is probated or proved, by which procedure the validity of the will and the capacity of the maker are tested. If the surrogate is satisfied as to these matters, he grants the executor a legal authorization known as letters testamentary. The executor then appraises or evaluates the property of the deceased and files an inventory with the court. All claims owing to the deceased are collected, and from these assets all obligations against the estate, including debts, inheritance taxes, and court expenses, are paid. After these deductions have been made, the executor distributes the remaining property among the legatees in accordance with the terms of the will. A complete account is submitted to the court, which examines it and then discharges the executor. Should the deceased fail to name an executor in his will or leave no such instrument at all, the surrogate's court then appoints an administrator, who performs practically the same duties as an executor. In the absence of a will, the administrator follows the state law governing the disposition of property of persons who die intestate or without a will.

VI. Corporate Trusts.

1. Member or Manager of an Underwriting Syndicate. From the above description of the more important trusts it is evident that a fiduciary company can serve the individual during his entire period of life. In like manner, a corporation can be aided from inception to

dissolution, and in fact many of the problems of corporate finance can be solved only with the aid of fiduciary institutions. A previous chapter has indicated the manner in which a new corporation is launched through the efforts of an underwriting syndicate. In this group, a trust company frequently participates as member when its banking department contributes funds, or as manager when the trust department directs the entire transaction.

2. Transfer Agent.

After a corporation has been successfully started, the trust company may act as general fiscal agent, rendering all kinds of financial services to the corporation. The trust company is not usually given general powers, but only one or more special duties. One of these special functions is that of acting as transfer agent for a corporation. In this capacity the trust company keeps accurate records of all changes in ownership of the stock resulting from sales and purchases. It must be remembered that a stock certificate is merely an evidence of the ownership of a certain number of shares which can be transferred from one person to another only by entering this assignment in the stock book of the corporation. The certificate itself is nonnegotiable, so the seller surrenders the old instrument and in its place the buyer receives a new one. Thus the chief duty of the transfer agent is to assure a "good delivery" or a clear title to the purchaser of the stock.

3. Registrar.

As securities worth hundreds of millions of dollars change hands daily, every precaution must be taken to protect the holders. The New York Stock Exchange has, therefore, ruled that every certificate of a listed security issued by a transfer agent shall be further

recorded by a registrar. His particular function is to certify that the amount of stock certificates outstanding at all times will not exceed the number of shares actually authorized and issued by the corporation. Since the registrar should act as a check upon the transfer agent, the Stock Exchange will not permit the same trust company to serve in both these capacities for any one corporation. For the transferring of shares, it is not always essential to retain the services of an outside agent, and if there is no active trading in its stock a small corporation usually handles these transfers in its own office. A number of the large industrial concerns whose stocks are listed on the Exchange maintain their own transfer agencies in New York City. Although a corporation is thus permitted to act as its own transfer agent, under no condition may it serve as registrar of the stocks which it has issued.

Such safeguards are not as imperative in handling bonds. Coupon bonds are negotiable merely by delivery from one person to the other, and this transaction is not recorded on the books of the corporation which has originally issued the securities. However, a registered bond is similar to a stock in that its ownership can be changed only by proper entry on the books of the corporation. It is unnecessary to issue a new instrument whenever a bond changes ownership, for the name of the holder, the date of the registration, and the signature of the individual acting for the registrar appear on the reverse side, and so a separate transfer agent is not needed in the assignment of the bond.

4. Trustee under Corporate Mortgage.

Probably the most important single trust arises when a corporation borrows money for a long period of time and pledges some of its property as collateral. The corporation, like the individual borrowing on real estate,

must sign a mortgage by which the title over certain property is temporarily relinquished. In the case of a small loan the borrower can give his promissory note and the mortgage paper directly to the lender, but a large corporation needs sums so great that they cannot be obtained from any one source, but must be gathered from a number of investors. So in place of one promissory note, the corporation issues bonds each representing a part of the debt. Obviously the mortgage cannot be divided into separate instruments for distribution among the lenders, and it must be surrendered to one party. In the early days of corporate financing, it was customary to intrust the holding of this mortgage to one of the larger investors, but in recent years this service has been performed by a trust company, which is then said to act as "trustee under corporate mortgage."

The nature of this trust may best be understood by describing the procedure in which it is actually handled. The directors of a railroad seek funds for undertaking permanent improvements on the line, and therefore vote to place a mortgage on part of their property, to which proposal the stockholders give approval. After all the details have been decided upon, the company's attorneys then prepare a mortgage indenture, or contract. This instrument contains a detailed description of the property which is being hypothecated. It may consist of real estate such as terminals and tracks. When equipment such as rolling stock is pledged, this property forms the basis of what is known as an "equipment trust." A third form of security is the "collateral" trust, which consists of personal property, such as stocks or bonds of railroads controlled by the corporation making the loan, or general securities owned by the corporation.

The mortgage indenture also defines the relations

among the parties concerned. In the case of physical equipment the railroad company is allowed to retain physical possession of the property, for it must continue to use the terminals and to operate the trains. The legal title to all this property is conveyed to the company acting as trustee, which holds it in behalf of the bondholders. The mortgage with these provisions is then submitted to the trust company. All the covenants or stipulations are carefully examined, and if they are satisfactory the company executes or signs the mortgage and thus acknowledges its acceptance of the trust. It then records the mortgage in the public office of the secretary of the state where the property is located. The bonds are delivered to the trustee for authentication, by which procedure the trustee compares the bonds with the provisions of the indenture, to prevent the corporation from issuing securities either in excess of the amount authorized or contrary to the terms of the mortgage. When the trustee has verified the validity of the bonds, they are then returned to the issuing corporation.

Provision is sometimes made during the life of the mortgage for its gradual amortization, so that the payment of the outstanding principal is distributed in installments over the entire period instead of remaining at the full amount on maturity. The corporation does this by giving the trustee a certain sum periodically as a sinking fund to retire a portion of the bonds. Whether or not a sinking fund is provided, the entire issue is finally retired at the expiration of the loan, and the trust company destroys the certificates. When the claims of the bondholders as to dividends and principal have been fully settled, the trust company returns the legal title of the property to the railroad. If, on the other hand, the borrowing corporation defaults in the payment of either interest or principal, or fails in com-

plying with any other terms of the mortgage, the trust company must then assume certain obligations. Although the trust company has under no condition guaranteed the value of the bonds, it is nevertheless expected to take every measure possible to protect the security holders. If the borrowing corporation fails to observe the provisions of the mortgage, it is the duty of the trustee to foreclose the mortgage and to have the property sold for the benefit of creditors in a manner already described in connection with an ordinary lien on a house.

5. Depository under Reorganization Agreement.

A foreclosure against a railway company presents an added problem, for even during these proceedings the road must continue in operation in the interest of the public which uses the system, and also for the benefit of the bondholders who wish to recover their money. In this situation it is customary to form a committee of the principal security holders whose personal standing will inspire confidence. This group drafts plans for the rehabilitation of the defaulted railroad, and as a first step requests all holders of securities to surrender them to a trust company which is designated as "depository under reorganization agreement." In administering this trust, the fiduciary company is really acting as stakeholder or, in the legal term, as agent in "escrow." This has been defined as an "instrument placed by a grantor in the hands of a third party to be delivered to a grantee upon the fulfillment by the latter of a certain specified condition." In the class of escrow being now considered, the grantors, or the owners of the defaulted securities, place them in the custody of the trust company, which in turn surrenders them to the members of the reorganization committee as grantees. The trust company gives the owners tem-

porary receipts for their securities and later, in a manner quite similar to the transferring and registering of original bonds, formal instruments known as certificates of deposit. If the work of reorganization is successfully performed, the trust company calls for the return of the certificates of deposit and, in exchange, issues new securities. At times it may be good policy to merge the railway with a stronger road, and then the trust company acts as depository of the securities under a plan of consolidation.

6. *Assignee and Receiver.*

If the finances of the railroad continue in a critical condition, the stockholders to protect their property, or the creditors to guard their interests, may appoint a trust company as assignee. Under the deed of assignment, the trust company collects the debts due to the railroad and as far as possible pays the claims of the creditors. Creditors are sometimes forced to press their claims before a court, which then places the corporation in the hands of a receiver. While his duties are similar to that of the assignee, they are limited to the objects specified in the terms of the application of the creditors and the orders of the court. The main purpose of a reorganization committee, assignee, or receiver is to assist the embarrassed corporation out of its difficulties and if possible restore it to paying basis.

A definite division of trusts cannot well be made, for some forms may be both individual and corporate. In the above analysis, a trust company was viewed as custodian of the securities of an individual, but the same service may also be rendered for a corporation. Conversely, a trust company may act as agent in escrow, assignee, or receiver for an individual as well as for a corporation. In general, the distinctly individual trusts are those of guardian, conservator, executor, and

administrator, while underwriting manager, transfer agent, and registrar are the exclusively corporate fiduciary relationships.

VII. Regulation of Fiduciary Institutions.

It is evident from this survey of the nature of trusts that fiduciary business differs from commercial banking in respect to fundamental principles and technical operations. It is apparent that the legal and personal relation between the trust company and the trustor, or beneficiary, is not merely one of debtor and creditor as exists between a bank and an ordinary depositor. These differences are fully recognized in state laws and federal rulings which subject fiduciary institutions to separate regulations. In conclusion, consideration will be given to the content of this legislation and its underlying principles. Federal and state regulations will not be differentiated in this analysis, since the former to a large degree are based on the latter, and, moreover, the Federal Reserve Board has ruled that a national bank which assumes trust powers must exercise them in conformity with the laws of the state in which it is located.

For the protection of certain classes of trusts, a fiduciary institution is often required to deposit special securities with the state Superintendent of Banking. At times, a trust company is compelled to execute a bond as guaranty that it will act in good faith. In addition to these requirements, fiduciary institutions must usually meet certain requirements of the capital and surplus, which are often higher than those demanded of commercial banks. Government examinations are made periodically, and national banks are thus under the scrutiny of both federal and state officers.

An institution conducting a fiduciary and banking

business must maintain a distinct and separate set of records for its trust business. Limitations are also placed on the manner in which a fiduciary institution may invest the funds which have been intrusted to it. If the will or deed creating the trust definitely describes the particular security in which the fund is to be placed, this stipulation must be strictly observed by the trustee. But the creator of a trust does not always define the exact character of the investment and leaves this matter to the discretion of the bank directors, who are then expected to exercise due diligence in their selection. When the form of the investment is not specified at all, the state law usually describes the eligible classes. In New York State, trust funds may be invested only in those securities which are legal for purchase by the mutual savings banks.

Part IV

THE BANKING SYSTEM

CHAPTER XXII

TYPES OF BANKING SYSTEMS

I. Banking Systems Grouped According to Organization.

From what has been said in the foregoing chapters it will have been seen that banking experience in the different countries of the world has evolved several types of banking systems. Writers on banking sometimes speak as if there were one kind or character of banking system which is more "scientific" than another, or as if the evolution of banking had pointed definitely to some single type of organization which was regarded as the most desirable or perfect. Much of this kind of suggestion has often been given to the public in the course of banking "reform" or monetary "education" movements. There is no foundation for the supposition that one kind of banking organization is necessarily better than another. Banking, like other phases of business organization, is closely related to the business community in which it exists, and depends much for its efficiency and success upon its adaptation to local customs. It is not even true that the so-called banking principles relating to liquidity, short-term loans, reserves, etc., have any universal force. They depend entirely upon the general conditions upon which banks operate, the demands of the community in which they are situated, and other factors. So, in developing a system of banking the essential test of its satisfactoriness is found in adaptation to conditions. It is, there-

fore, true that banking systems throughout the world differ very widely from one another, and they must be judged by their adaptability and success in practice.

From a broad general standpoint, however, it is possible to recognize several types of banking systems. Looked at from the point of view of the legal basis or status in the matter of organization, three chief groups may be recognized, as follows:

(1) The central banking systems, of which the banks of England, France, and others of similar kind are the best examples;

(2) The independent-charter banking systems, of which the Canadian bank is probably the best known; and

(3) The free banking systems, best represented by the national banking system of the United States.

II. Central Banking System of Great Britain.

In the case of the central banking systems there has been developed a nucleus which represents practically the combined banking strength or the pooling of bank reserves of the community. Other banks are then offshoots from such an institution, such as the Bank of England, not in the sense that they are owned or directed by it, but simply in that they look to it for guidance and direction, shape their policies in accordance with its doings more or less, and count upon its aid under certain given conditions. Before the opening of the European War it was believed that the British banking system was perhaps the best type of organization. That banking system included a number of large, strong institutions organized for the performance of regular commercial banking operations in England. These banks had themselves in many cases been de-

veloped out of a considerable number of other banks, so that each of them represented a pooling of interests. Each such bank had a considerable number of branches scattered throughout the United Kingdom, while the main office of each was in London. The Bank of England was thus surrounded by a group of strong commercial institutions. At other points in the United Kingdom were situated the headquarters of other banking systems. Thus in Scotland and Ireland independently organized institutions existed, each with its set of branches, and such banks usually had a branch in London for the purpose of transacting business with the Bank of England or of participating in the general financial market at that place. In all, there were in the United Kingdom probably about ninety banks with interlacing systems of branches; but the whole banking structure was practically dominated by a few strong banks with headquarters in London, to which reference has already been made. The Bank of England, as the result of long practice and custom, was the holder of the bulk of the reserves of these banks. At times before the war the bulk of the cash held by the banks fell as low as 3 or 4 per cent of outstanding liabilities, and various banking authorities were inclined to view this with some alarm. The Bank of England, however, by maintaining a strong reserve and a liquid portfolio, kept itself in position constantly to meet the demands of the other banks, and consequently no British bank which was in possession of paper eligible for discount or salable in the open market was ever without the means of providing cash with which to meet the demands of its depositors. During the war, as elsewhere observed, there was a change in this state of affairs, the British banks amalgamating into a still smaller number of institutions. Confining attention, however, to the prewar situation, we may

say that the British banking system was practically a pure central bank organization.

III. Independent-charter System of British Colonies.

As contrasted with this highly centralized, highly organized banking system of Great Britain, attention may be given to the colonial systems of banking, of which those of Canada and Australia are good examples. In each of these countries there has been organized a relatively small number of banking establishments. In some instances colonial banks have been created under a general incorporation law like our National Bank Act, but subject to restrictions which kept the number of such banks very small. In others the banks were created through special charter which authorized the establishment of a banking institution vested with specified duties and powers. Whichever plan was followed, the result was practically the same in that the outcome was the creation of a comparatively small number of powerful institutions which directed interlacing networks of branches throughout the territory in which they were organized. Thus, under the Canadian banking system, thousands of branches scattered throughout the Western states gave to the population of Canada practically as many actually open or available banking offices as have been developed in the United States under the plan of incorporating independent banks. The result of the system was to establish a small banking community. In Canada the total number of banks is seventeen at the present time, and has seldom been much over thirty. In Australia to-day about twenty-five banks exist, and, although some of them have their headquarters in London, the majority are locally incor-

porated. Unity of action in banking is obtained in each country through informal communications between the managers of the different banks or through action of the bankers' clearing house, which operates as a kind of combination or pooling of interests for the nation as a whole. While there is no central bank of rediscount, each bank is in itself sufficiently strong to exercise, under good management, many of the functions of a central bank, or in cases where material aid is needed, it may be obtained through interbank rediscounting or sale of bills on a considerable scale. In Canada, an element of centralization has been superimposed through the creation of a joint guaranty fund held by the government and designed for the purpose of paying off the notes of any bank which may happen to fail. In Australia, centralization is in a measure obtained through the recent creation of the Commonwealth Bank of Australia, operated by the government and holding its deposits. The Commonwealth has, however, tended to be a bank among banks, and has never attained the pre-eminence of the Bank of England in Great Britain as a bankers' bank.

Taking the Canadian and Australian systems as types, therefore, they may be regarded as representative of a fairly well integrated and developed banking system. Their characteristic feature is seen in the application of what amounts to centralized control through a community of interest, moderately supplemented, as in the case of Canada, by some special features of public intervention or participation. Nowhere, however, in the British colonies has more than sporadic progress been made toward the establishment of a positive and direct governmental control over the banking system. The indirect control sought to be applied in some countries like Australia, through the chartering of a governmental institution, has thus far

been only partially successful, and its future may be regarded as still to be determined.

IV. Free Banking System of the United States.

In the United States under the national banking system the idea of free banking was carried to its extreme not only through the unrestrained chartering of institutions with very small capital (the minimum being made in 1900 as low as $25,000), but also through the prohibition of the establishment of branches. Inability to create branches consequently implied the necessity of creating many small institutions, with the result that in the United States to-day the total number of banks is roundly stated as 30,000. These banks are of all grades of size, efficiency, management, and types of business, and even in the national banking system, numbering but 8,000 members, all of which operate under some uniform standards of supervision, owing to the fact that they are obedient to the dictates of a single statute, several different kinds of banks must be recognized. Taking the typical New York City or Chicago institution, we may regard it as practically on a plane with the English joint-stock banks or with the chartered Canadian or Australian banks. It is an institution of large capital, broad ramifications, and highly advanced methods of business. Were it permitted to establish branches, it would undoubtedly do so, placing them at strategic points throughout the country and eventually building up a network of communications similar to those existing in Canada or in Europe. On the other hand, the small country bank of $25,000 capital has few connections outside of its own community, and these only with larger banks which act as agents for it in the holding of its funds and in providing remittances. Such banks

are to be regarded as analogous to the branches of the great European and Canadian institutions which are established here and there merely for the sake of meeting the convenience of the community.

There has always been much discussion about the question what type of banking system is the best or the most scientific—a problem referred to at the opening of the present chapter. This controversy has reduced itself to several distinct phases which may be grouped as the discussion about central banking or the desirability of a central bank, the desirability of branch banking, and the question of interlocking directorates or interbank control. Some attention ought to be given to each of these topics by every student of banking evolution, since a comparison of ideas relating to them throws much light upon the question of types of banking systems. In practically every industry to-day there is a process of integration—that is to say, a process of classification and organization which results in the establishment of definite units of business. This is true in banking as in other industries; in fact, it is probably more broadly true in banking than elsewhere, owing to the fact that banking is so highly developed and systematized as an occupation. This process of integration in practically every industry works toward the standardizing of products, the establishment of narrower margins of fluctuation in prices, and the creation of methods of insuring community of action and unity of control throughout the industry.

V. Movement Toward Centralization.

Everywhere in banking there is a movement toward what is called centralization, not in the sense of autocratic control or monopolistic price fixing, but merely in the sense of economy of resources and elimination of

risk. The different types of banking systems to which reference has already been made are merely different methods or plans of controlling the legal and economic organization of banks, and experience under them has shaped their development accordingly. The centralizing movement to which reference has just been made is seen in the central banks of England and France, but is also seen in the decreasing number of Canadian banks, and, before the establishment of the Federal Reserve system, was reflected in the increasing amount of interbank control which resulted in giving to large banks in the cities power over many smaller institutions throughout the country. These tendencies were the outgrowth of a desire or necessity for unity of action, of interest rate, and of other policies. In the British banking system centralization was obtained as the result of custom and the placing of funds in the hands of a single institution which was regarded as best able to safeguard them. In the Canadian banking system the unity of action and policy was obtained through the constant narrowing of the number of institutions themselves, the fact that they and their home offices were in constant communication with one another and that an informal organization had been established to include them.

In the United States a similar result was obtained prior to 1902 through the work of our clearing houses, through the development of systems of correspondents ramifying throughout the country, and in various other ways. The question whether a central bank was desirable was thus a mere question of detail of management. In some countries it had been found expedient to create such a central bank and, as in England, such a bank had been successful in controlling the general financial situation upon an equitable basis without the aid of any legislation. In other countries it had been

deemed wise not to create a formal organization for the oversight of banking, but to leave matters to develop on a semi-competitive basis in the belief that the community of interest would exert itself so far as was necessary, and that it was not wise to give to this community of interest any definitely organized form. The banking systems of the several countries to which reference has been made, may thus be regarded as belonging to different grades or lines of development rather than to different types of banking. In every country banking method is to-day substantially similar, although details may differ widely, and interbank relationship is, as has already once or twice been stated, largely a matter of organization.

VI. Banking Systems Classified According to Operation.

A problem which should be considered as distinctly associated with this matter of type of banking system is, however, that of the discount market. In studying the discount market we are in position to pass beyond the view of banking organization, which regards it as merely a matter of law or technic, and to analyze a much more fundamental problem in connection with banking evolution. This is the scope of operations of the bank. Here we may likewise recognize some three distinct types or styles of banking system, as follows:

(1) The heterogeneous banking system in which a bank is authorized to perform practically any kind of business that it may choose;

(2) The specialized banking system in which different kinds or types of institutions are recognized and are defined by law;

(3) The organized banking system in which the

different classes or groups of banks are definitely related to one another and are given a specified claim upon or connection with one another.

VII. Heterogeneous Banking.

We may look first at the early, primitive type of heterogeneous banking institution in which there was practically little or no limitation of function. The banks of the early modern period in Europe were of this variety. They loaned upon real estate, took personal property in pledge, issued notes, accepted foreign coin or bullion and held it on deposit, eventually issuing credits which took the form of deposit accounts, and also did more or less of a real-estate and mortgage business. As time went on it was seen that good banking called for a differentiation of function, and that the best results were obtained either by departmentalizing banks and keeping their various activities separate one from another, or else by creating different kinds of institutions, each of which was qualified to perform a special function or duty. Thus in British banking a sharp distinction came to be drawn at an early date between the commercial bank which dealt only in very short-term live paper, and the institution which undertook corporate financing, promoting companies, and the making of investments. In the United States this distinction was carried still farther, and as our trust companies grew up they assumed fiduciary functions, acting as trustee, receiver, guardian, and in many other capacities. They were often essentially investment institutions dealing in long-term securities, bonds, mortgages, and the like. Differentiated from these trust companies, were the savings banks, whose duty it was to gather small funds from a great number of persons and to invest them in safe securities of some

kind which as the result of custom came to be chiefly real-estate mortgages in various forms. The commercial banks, on the other hand, fell into one or two broad classes according as they served primarily agricultural or manufacturing interests. In general it may be said that the progress of banking development tended, either as a result of legislation or of practice, to differentiation of banking operations either on the basis of security taken, or of period for which loans were made, or of the form of loan, whether in the form of an actual advance of money or of the issue of notes, or the establishment of deposit accounts. Looking over the world to-day, there may be seen in the less developed countries many banks which still exercise a great variety of functions, and even in some of the more advanced commercial countries, as in the United States, it is to be observed that the banks in the more primitive communities perform a greater diversity of functions than are customarily undertaken by the larger banks.

VIII. Specialized Banking.

The question has naturally presented itself in most countries whether it is wise to attempt by law to develop banking on specified lines, recognizing given types of institutions and enacting codes of legislation to control them, or whether it is better to allow custom and practice to differentiate institutions one from another. In the United States we have sought for many years past to legislate in such a way as to define and to develop different types of institutions. Thus there have grown up the national banking system, organized under the National Bank Act; the state banking systems, substantially similar to the national system, but organized under state acts, which vary in detail; the trust companies, organized under state law and differentiated

sharply from banks; the savings banks, usually established under legislation worked out in utmost detail; the private banking houses or investment houses, sometimes organized under general law or otherwise organized under legislation specifically intended for their governance; and a variety of other institutions such as rural credit associations, mortgage banks, building-loan associations, and the like. If it can be said that there has been an underlying theory directing this legislation, that theory would probably be held to specify that there should be limitation of functions, and that banking operations should be practiced only along narrow lines by institutions which are confined to a single type of business. This theory has much to sustain it. Credit in the modern world assumes an indefinitely complex form, and it is only a generalization from experience to say that institutions which assume many different kinds of risks are not usually able to judge any one of the risks very accurately or to provide carefully against it. The commercial bank which has a great many deposits and at the same time is lending heavily on real estate or long-term securities is always in danger of having its funds so "tied up" that it cannot free a sufficient amount of them for the purpose of meeting the demands of customers who may call for the redemption of deposits. On the other hand, the institution which is devoting itself chiefly to investment and fiduciary operations is hardly likely to be in a position to study commercial credit carefully unless it organizes a specially equipped department for that purpose. In a country where, as in the United States, the idea of free banking has been tenaciously adhered to, it was almost inevitable that there should be an attempt to protect the public against errors on the part of those who were undertaking the banking business, and one way of guaranteeing such protection was

to limit the number of operations in which men of inexperience or poor judgment might engage.

In some foreign countries there has been a tendency to work along the same line partly as the result of law, but more largely as the outcome of custom, and lines of distinction have been drawn almost exactly similar to those which exist in the United States. Nevertheless, when the Federal Reserve Act was passed, it included a provision which allowed national banks to undertake fiduciary functions—that is to say, to parallel and compete with trust companies, and this bad example in legislation has been followed in a number of states. Acting on permission thus granted, more than 1,000 national banks applied for and received permission to engage in trust-company business. Some of them have taken over such business on a comparatively large scale, but experience is already demonstrating what was known before—that such a mixture of functions is a doubtful venture. When successfully undertaken it involves the co-ordinate organization of really separate institutions conducted under a single management, but adhering closely to the dictates of conservatism and experience in the management of their several kinds of business. In the main, it may fairly be said that the tendency of modern nations is away from such combination of functions and is toward specialization.

IX. Organized Banking.

A further refinement of conditions such as those which have been sketched in the case of institutions which grow up with their functions differentiated as the result of law or custom is found in those countries where a definite effort has been made to relate institutions to one another—that is to say, to build up a definitely organized system of banking. This is the

third of the "types" of banking systems already referred to on page 361 of this chapter, and differs from the others, as there suggested, only in that there is a very much more clear-cut notion of organization or effort to establish a systematic relationship among different kinds of banks. We may see how this type of banking system is developed by casting a glance at recent American history. When the Federal Reserve Act was first under consideration the intention was to confine it entirely to national banks. Political pressure forced the admission of state banks and trust companies as members of the system, so that there was thus established a distinct classification as between banks (national) which were obliged to accept membership and those which were only voluntary members. When the trust companies came into the system in considerable numbers there was in effect a third grouping of membership, national and state banks being generally active rediscounters, while many trust companies came in as insurance against panic or for the sake of the prestige and advertising which they derived therefrom. In the Federal Reserve Act, provision was made for discounting nonmember bank paper under specified conditions, so that a fourth line of relationship to the inner banking organization was established—that of nonmember banks permitted to obtain accommodation indirectly from Federal Reserve banks and later allowed also to use the collection facilities of the Federal Reserve system.

Further organization was provided by the adoption of the Federal Farm Loan Act, whose purpose it was to furnish agricultural loans to the farming community and which gave to farm-loan institutions certain rights in the use of the facilities of the Federal Reserve system for the holding or transferring of funds. Under the old national banking system and in some of the state-bank

systems, provision had been made for recognizing different groups of banks as central reserve city, reserve city, and country banks, with provisions governing the kind of deposits permitted to be made by one with the other. Altogether, therefore, there has been introduced in the United States a very substantially developed organization in which the discount relationships of banks to one another are carefully defined and in which a rather strict control is established by all over the types of business that may be undertaken by any of them.

Contrasting this situation with the specialized banking system of England, in which the lines of distinction between different types of institution are even more carefully drawn than in the United States, but in which the amount of law relating to the subject is vastly less than here, the distinction drawn between the organized type of banking system and what we have called the specialized type is obvious, while in both cases a clear line of distinction exists as against the heterogeneous banking system in which institutions come into existence with the privilege of doing practically anything that they choose. It remains true that in many parts of the United States, and in many of the less developed countries of the world, the exercise of various unrelated functions by banks is still the rule. The country bank in the western part of the United States will discount local commercial paper, lend on long term to farmers with mortgage security, accept savings deposits and pay interest on them, discount the notes of local merchants, furnish domestic remittances, make collections, hold for safe-keeping the valuables of customers, and perform a variety of other duties. The process of differentiation goes hand in hand with the progress of the community in the division of labor. One after another the various functions of

the primitive bank are sloughed off or transferred to other institutions, until at length the specialized type of banking emerges either with or without definite organization of the kind already described.

From what has been said in this chapter it will be seen that the expression "banking system" or "type of banking system" is one which must be used with caution and which can be understood only in connection with the grade of industrial situation to which it applies; while still more caution must be used in approving or disapproving this or that plan of organization until there is exact knowledge as to the conditions under which it is to be put into effect. Banking is in one aspect a branch of business and goes hand in hand with business. It cannot be developed very much faster than general business develops, and its principles and methods must always be those which render it efficient in its aid to and support of general business.

CHAPTER XXIII

BANKING ABROAD

Works on banking frequently include a somewhat detailed description of European central banking institutions, such as the banks of England, France, Germany, etc., and the discussion is sometimes at least presented in such a way as to suggest the thought that these "central banking countries" are fully provided for each by its own central bank which entirely meets the needs of the population. In fact, central banking has been usually the outcome of a slow evolution.

In most European countries the development of banking has been a long process extending over some hundreds of years. There has been a fairly well-marked tendency toward the development of a single type of banking organization, but there are still very broad differences of method and even of theory between European banking systems. A review of the history of the European countries shows that in practically all of them banking began as a more or less unregulated private occupation, and that as the business grew to greater importance it gradually fell under the supervision of the government, to some extent at least, or was subjected to control by a central institution in which the government took a strong part and which became sufficiently active in the market to exert a powerful influence over banking transactions in general.

Most of the non-European countries which were or-

ganized on the modern industrial basis by immigration from Europe have naturally followed European models in banking organization. Nevertheless, a very considerable difference of practice and method had developed in many of them, owing to differences in local needs, prior to the European War. It should be emphasized, moreover, that the student of foreign banking will do well to differentiate sharply between the conditions relating to banking and currency which existed prior to the European War and those which have developed subsequent to the close of the struggle. At the present time monetary conditions practically the world over are abnormal, and scientific analysis of banking systems, especially those of Europe, must confine itself very largely to prewar conditions, although taking account, as a matter of information, of the transitory problems which have arisen of recent years.

Looking back for the moment entirely to prewar conditions and confining attention exclusively to western Europe, it may be said that the standard form of banking organization which had grown up during the commercial development of the nineteenth century was essentially a co-ordinated or centralized system in which a fairly sharp line of division had been drawn between banking functions that could to best advantage be carried on as a private or individual matter and other functions which were better performed as a matter of community action or joint and common responsibility. As representative of the former may be taken the task of making direct loans or extending credit to individuals, while as representative of the latter may be cited the issuing of notes. In practically every European country the duty of issuing notes had been taken over almost entirely by a central banking institution, while in one way or another this institution had also acquired the responsibility for holding the bulk of the reserve funds of

the community. In like manner the central bank had usually been assigned the duty of holding, receiving, and disbursing the public funds of the nation.

On the other hand, in practically every country it had been found undesirable to have the central bank, acting as it did on behalf of the financial community as a whole and vested as it was with a public quality, discharge the duty of testing private credit or of carrying the responsibility for loans to individuals, or that of regulating or controlling relations with foreign countries by furnishing exchange. It may be stated generally, therefore, that European countries had fairly closely concentrated the functions of note issue, of the handling of public funds, and of the conservation of reserves, and had tended to decentralize the other functions of banking.

Particularly was such decentralization deemed to be desirable in the case of loans to specific classes of enterprise which were vested with a peculiar character of their own. In nearly all of the European countries there had accordingly been developed classes of institutions known as export banks, whose function it was to facilitate foreign trade, land-credit institutions of various kinds intended to assist agriculture, and specialty banking establishments which devoted themselves to meeting the requirements of certain elements in the financial and business community.

A brief sketch of some of the principal foreign banks, intended to present certain of their salient features, will now be necessary. Effort is made only to furnish the basic facts concerning each of the systems, both as originally developed and as modified by war conditions. It should be remembered, of course, that the existing situation in practically all foreign countries is purely one of transition, the war having brought about changes which cannot be considered permanent.

I. The Bank of England.

The oldest among banking systems in anything like their present form is the Bank of England, which dates from 1694, and which as operated to-day finds its fundamental charter in the Bank Act of 1844, which superseded earlier statutes. The bank, although owned by individual stockholders, is to all intents and purposes a public institution whose most important functions are the general direction and control of the money market, the handling of government finances, and the supplying of a uniform note circulation.

Great Britain was the earliest country to develop banking upon the modern highly specialized and differentiated basis. At the close of the seventeenth century England had already advanced far toward a recognition of the special functions performed by the issue of bank notes and of the necessity of centralizing a certain proportion of the banking resources of the country in the hands of one institution. At that time there was in existence a considerable number of banking houses operating in competition with one another and controlled by no single policy; owing, moreover, no obligations to the government save those owed by any good citizen.

Under the Act of 1844 the issue department of the bank was permitted to put out notes only when protected pound for pound by coin or bullion, except that a basic issue of £14,000,000 sterling might be placed in circulation upon a basis of the government debt. Other banks of issue were to transfer their note-issue privilege from time to time to the Bank of England, and such transfers were to bring about an increase in the issues of the Bank of England to the extent of two-thirds of the independent bank circulation so retired. Before the war the note issue secured by

government bonds had thus risen to the equivalent of about $90,000,000, the total outstandings being about $150,000,000.

The function of the Bank of England in controlling the market is exerted by the performance of a very conservative commercial banking business based upon the discounting of short-term paper, partly for banks and partly for individuals, the bank, where necessary, going out into the open market and buying such paper of specified amounts as might be available. Before the European War the handling of government finances consisted largely of the receiving of public funds and the disbursing of them upon suitable check or warrant, or from time to time conversion operations in the long-term debt when necessary, accompanied occasionally by short-term advances. The war changed England's financial structure to a great extent, bringing about alterations which may or may not be permanent. In the Currency and Bank Notes Act of 1914, convertibility of currency and bank notes into gold was provided for, but for several reasons has never been really effective. The government had issued, early in the war, treasury notes which varied in amount from time to time, and at the time of the armistice probably amounted to about £1,600,000,000. Under the Currency and Bank Notes Act both currency notes and Bank of England notes were made legal tender for any amount, and both kinds of currency have continued to circulate in large volume, the total in currency notes outstanding at the close of 1921 being £423,000,000. It may be assumed that eventually the currency notes will be retired and the Bank of England may succeed in getting back to a basis of actual convertibility of notes into gold.

The war, however, has made but little change in the actual practice of banking in Great Britain. For a long

time it has been the custom of other banks to carry their reserves in the form of deposits with the Bank of England. In the United Kingdom as a whole there are to-day about seventy-five institutions, and while the Scotch and Irish banks are in a sense more or less independent of the Bank of England, they do in practice carry considerable balances with the latter, while the so-called English joint-stock banks, with headquarters in London, have been in the habit of carrying the bulk of their reserves with the head office of the bank. While the Bank of England has at the present time eleven branches here and there, these are merely for the purpose of convenience, the English joint-stock banks having much more numerous branches which serve as the actual medium of communication with the public at large. The Bank of England has of recent years, although carrying a certain number of deposit accounts for private individuals and also doing a discount business for such customers, tended to become more and more a bankers' bank, dealing largely in bankers' acceptances and confining its operations so far as practicable to liquid paper. During the war, like all other banking institutions, the Bank of England was, however, obliged to make very large advances to the government on the strength of the treasury notes or short-term bonds issued by the latter. Such issues were not a satisfactory basis for the creation of deposit credit or the issue of currency, and the level of prices, partly as a result of this method of banking, accordingly advanced about 100 per cent between 1913 and a date soon after the armistice. Effort was made by British financiers of the more conservative group to obtain a cessation of government short-term borrowing from the Bank of England, but without any material success, although the total volume of such loans has in the aggregate fallen off. There has been a steadily

declining movement of government obligations toward the banks and a steady increase in the amount of government obligations absorbed and held by individuals. One of the important features of postwar development in Great Britain has been the tendency of the larger banks to consolidate, there being at the present time five outstanding institutions of great size. Both in the case of the Bank of England and in that of other European banks, it seems that a restoration of convertibility of paper and deposits into gold can be effected only in case the foreign balance of the country's trade is restored to a suitable level, and such a result can be accomplished only through increased exportation and reduced importation, associated probably with the borrowing of considerable amounts in actual gold from foreign countries. It is as yet uncertain how or under what conditions so extensive a reform as is indicated can be brought about.

II. The Bank of France.

Dating from 1803, the Bank of France is in many important respects analogous to the Bank of England in its organization and general public service. The public service of the bank, however, is in France relatively less important as compared with its service to the individual than in England. On the other hand, the method by which the Bank of France extends credit is quite different from that adopted by the Bank of England. Whereas in Great Britain, as already noted, the principal means of lending to the individual is the bank deposit, so that the bulk of all transactions are effected by checks, in France the bulk of the business is transacted through payments made in notes, so that the advances of the Bank of France are naturally in large measure in the note form. Its statement, there-

fore, shows a very large volume of notes in circulation and a relatively small volume of deposits, whereas in England before the war the total of notes outstanding was relatively small, while the volume of deposits was disproportionately large. The Bank of France has about six hundred branches scattered through the various "departments," or districts, into which France is divided, and direct discounting is carried on to a very considerable extent with the public at large. The paper discounted is small in amount and has at times run down to very low figures. The bank has been in the habit of requiring such paper, when purchased or discounted by it, to be indorsed by a banker, which in effect has made its transactions practically rest upon the footing of bankers' acceptances, or the equivalent thereof, so that the French market received the support of the Bank of France through this requirement of insurance of credit risks, even though it was true that the bank was dealing largely with the actual customers who made the paper as the result of business transactions. Partly owing to the very broad powers of the Bank of France and the habit of dealing with the public very widely, however, the development of the French credit and banking system has been on a much more limited scale than in England, relatively few banks having developed there. There existed in France before the war a certain number of deposit banks whose total deposits were less than about $12,000,000, and twelve credit institutions with deposits amounting to $5,084,000,000. These institutions had many branches scattered throughout the country and dealt largely in investment securities. Such banks, like the British joint-stock banks, rediscounted directly with the Bank of France, which in turn issued to them notes, and these notes were held by them in their vaults as a basis for their own operations. As in the

case of the Bank of England, the Bank of France possessed a very decided public function and was called upon not only to receive and disburse government funds, but under the terms of its charter might be required to loan up to 200,000,000 francs (about $40,-000,000) to the state. Although the stock of the Bank of France was privately owned, the government had power to appoint its higher officers and practically to control it in essential particulars. During the war the Bank of France underwent much the same changes of function and structure as did other central banks, except that, owing to the great strain placed upon the institution, these changes were probably more far-reaching and severe than elsewhere. A great inflation took place as the result of direct discounting of government paper and the issue of notes against it and the rapid development of an adverse trade balance. Both currency and credit inflation became the rule under the French system, and while bank deposits up to the time of the armistice had grown only about 70 per cent, circulation of Bank of France notes had increased to about 37,000,000,000 francs as against some 6,000,-000,000 before the war. Withdrawal of gold, refusal to allow its exportation, widespread use of bank-note currency, and various other expedients for controlling exchange and money values were put into effect during the war. Practically all of them tended to render the banking situation more difficult and to depreciate the value of the notes and deposits of the Bank of France as stated in terms of foreign currency. Although this depreciation was for a time held in check through the adoption of a plan of stabilizing exchange, such stabilization was never very successful and was eventually discontinued a few months after the armistice. The value of the inflated notes and credits was thus left to take care of itself and has since been far below nominal

parity, the franc, which was worth 19.3 cents in American money before the war, being quoted at the close of 1921 at about 7½ cents in American money.

III. The Reichsbank.

Banking had developed in Germany along very much the same lines as in England and France during the period from 1875 onward. Germany, broken as it was into a considerable number of independent states prior to the war of 1870–71, had not developed any general system of banking, but in most of the German states there had grown up state banks more or less remotely resembling the Bank of England or the Bank of France, and as a rule charged with the handling of government finances and the furnishing of note currency under a monopolistic charter. After the formation of the German Empire it was desired to create a more uniform discount market and system of banking, and accordingly the Reichsbank was established under the Act of 1875, which substituted the new institution for the older Bank of Prussia, which dated from 1765. The Reichsbank was, in general thought, modeled upon the lines of the Bank of England, but in many important particulars it sought to introduce methods which were better adapted to German conditions. With a capital of 180,000,000 marks, its note issue was allowed to run up to 250,000,000 marks, a sum which was later increased to slightly less than 550,000,000 marks. The older banks in the several German states retained their right of issuing currency, but it was provided, just as in England, that if they failed to exercise them or gave them up at any time, allowing them to lapse into disuse, they should be transferred automatically to the Reichsbank. Government relationship with the management of the bank was modeled upon the system which

had been developed in France. The chancellor of the Empire was made president of the bank, four other members of the council of control being also appointed by the government. Representation of private stockholders was furnished by a special board, which was placed in charge of the routine business. The charter of the Bank of Germany evidently contemplated that the bulk of the business of the institution would be conducted on the basis of credits established through the issue of notes, as in France and other continental countries, hence an exceptionally careful effort to limit the issues, it being provided that under ordinary circumstances the fixed amount of notes specified in the law should not be exceeded, although under exceptional conditions notes might be issued by them to this limit upon condition that the bank pay a tax of five-forty-eighths of one per cent per week, or about 5 per cent per annum, upon all such excess circulation. All of the circulation, moreover, was to be protected by a holding of bills running not over three months and secured by two signatures. In its general business the Reichsbank was intended to be a bankers' bank, doing business primarily with other institutions and limiting itself for the most part to very short-term paper. Loans were made both on commercial paper and on the basis of approved securities. Surrounding the Bank of Germany there have developed about twenty large joint-stock institutions, each with a system of agencies and branches. Taking Germany as a whole, the total number of banks is estimated at from three to four thousand, most of them very small local institutions. The German banks quite consciously were developing along the same lines as were being followed by the English institutions prior to the war. Conditions, however, were materially altered by the war along lines that must be briefly sketched.

Germany, in the expectation that the war would be short, had not arranged to revise her system of taxation, but undertook to provide the necessary means through banking advances and currency issues. Later, long-term loans were resorted to. Provision was made soon after the opening of the war for giving the notes of the Reichsbank legal-tender power, while government treasury notes were also issued. The bank was allowed to hold these treasury notes and treasury obligations as protection for its own notes, and a special kind of bank organized for war purposes made large advances to borrowers against government bonds. The effect was to increase the quantity of circulating medium in Germany, including both coin and notes, from about 5,500,000,000 marks before the war to about 41,000,000,000 marks at the middle of 1919. During the post-armistice financing period there was a large addition to the floating debt, and the notes of the Reichsbank were enormously expanded, so that by the end of 1921 the outstanding circulation was over 100,000,000,000 marks, and the mark was quoted in New York as low as three tenths of a cent. While there was no material change in the status of the outside banks, they tended, as in England, to become more and more concentrated and fewer in number, small and weak banks being absorbed. This process was considerably accelerated by the bad foreign-exchange situation of Germany.

IV. Canadian System.

The Canadian banking system differs materially from the standard central banking systems of Europe, being without any central banking organization and consisting of seventeen large specially chartered banks dating from various periods, all authorized to issue notes in established branches and several of them maintaining

large networks of branches throughout Canada. The note issue of Canadian banks is limited to an amount equal to the capital of each issuing institution, and a joint guaranty fund is established through a fund deposited with the Canadian government and kept constantly on deposit for the purpose of redeeming the notes of any bank that may fail. In the event of a bank failing, its notes become a lien upon the assets of the bank and may be redeemed out of the guaranty fund. The notes also draw interest from the time of the suspension of the bank issuing them. Of late years the extension of credit by means of deposit accounts on books of the Canadian banks has increased, but the notes continue to be the characteristic form of bank credit over a large part of Canada. During the war the Dominion government issued government circulating notes secured by bonds deposited by the banks under approved conditions, while gold redemption was suspended both as to bank notes and as to Dominion notes (government legal-tender notes). Dominion notes were not issued, however, in very large amount at any time, and the main effort of Canada was to conserve her supply of gold and, as in the United States, to further the raising of war loans by providing for their discount on liberal terms at banking institutions. Apart from the method of note issue, the most striking phase of Canadian banking, as well as the one to which reference is most frequently made in the description of banking systems, is the extensive creation of branch banks. This has gone so far that, notwithstanding only seventeen banks exist in Canada, they with their branches constitute a number of banking offices open to the public which is fully as large in proportion to the population as is provided by the independent banking system of the United States. The branch banking system has had two great merits, that of easily shift-

ing funds from one part of the country to another as wanted, and the other that of equalizing rates of discount as between different parts of the country. Both factors have proved exceedingly beneficial and helpful in the course of Canada's economic and financial growth.

V. Other European Banking Systems.

Most of the banking systems of the world have been developed in comparatively recent times and have been modeled more or less closely upon the practices of France, England and her colonies, or Germany. In those cases, as in Italy, where much older banks existed, the organization and methods of such banks have been adapted from time to time along lines which had been worked out in the more highly developed modern countries where banking principles had been most fully applied. Among the countries which before the war were regarded as having fairly well-established banking systems were Italy, Spain, the Scandinavian countries, and Russia—Russia's banking system being far less highly developed and much more primitive in its methods than those of other countries. Switzerland had developed a national bank entitled the Federal State Bank, as well as a series of cantonal banks, outside of which were the privately organized institutions of various kinds and which had succeeded in developing a money market there similar to that existing in France.

VI. Banking in South America.

South American countries had had a banking experience widely different in character from that of Europe prior to the outbreak of war in 1914. None of them

was an active participant in the struggle and hence none was subject to such serious distortion of its banking system as was true of European countries, although changes and disturbances have none the less been significant.

A representative South American country, in so far as banking and credit are concerned, is Argentina. Her banking system had before the war been developed very largely after the English plan, its central support being the Banco de la Nacion, a central government bank. Associated with this institution was a national land-credit bank whose function it was to lend on land mortgages and issue bonds to investors, out of whose proceeds the mortgage loans were provided for. Foreign banking has always had an important status in Argentina, British, French, and German institutions organizing branches which did an active commercial business. American banks, after the organization of the Federal Reserve system, likewise established branches in Argentina, so that the credit needs of the population in export and import trade were largely supplied through the efforts of outside institutions. Domestic banking needs were met by the national bank and its branches. At the close of the war the national bank was in possession of about $36,000,000 in gold and about $300,000,000 in paper, the amount of government notes and deposit accounts being about $777,000,000. Gold and gold obligations, amounting to about $484,000,000, were held by the government. No serious alterations of the prewar system occurred as the result of monetary disturbances, but transfers continued to be made on the basis of actual payment, although the export of gold was forbidden, save under special license, with a view to protecting the monetary supply. An advance in prices that took place in sympathy with prices in other countries did not, on the

whole, bring the banking and currency position into jeopardy.

In Chile, a system somewhat similar to that prevailing in Argentina, and on the whole modeled upon British lines, has been in process of development for many years past. The Banco de Chile, with a capital of $120,000,000 subscribed, of which $60,000,000 has been paid up, has been the central factor in the financial organization of the country, issuing notes and creating deposits. Several other local institutions, organized with native capital, have done a good business, their relations to the Banco de Chile being somewhat similar to those between the British joint-stock banks and the Bank of England. Several foreign banking houses have also operated in Chile, as they have in Argentina, and to them has been committed in large measure the financing of the exports and imports of the country. An issue of government notes has been in circulation for more than thirty years, the amount of the issue gradually increasing up to $150,000,000 in 1914. Special issues of notes were provided for at the outbreak of the war in order to facilitate the development of the nitrate industry, but there has not been, either before or since the war, any issue of genuine bank notes, the sole circulating currency being the government issues already referred to. Immediately after the war the gold holdings of the Chilean banks were probably in the neighborhood of $103,000,000, or about the same as at the opening of the contest.

In other South American countries systems of banking are in large measure similar to those of the two countries already described, except that in some the participation of foreign banks has been much greater than in the more stable and powerful South American states. Where foreign capital has succeeded in acquiring a foothold it has occasionally come to exercise a practically

dominating influence in the local financial institutions, oftentimes through the control of the central bank even when such bank possessed a monopoly of note issue.

VII. Banking in the Far East.

Banking in the Far East varies greatly from country to country, some nations and states having reached a substantially high degree of development following Western models, while others are far behind in the degree of their growth. Probably the most complete and well-developed banking system in the Far East is that of Japan. There a banking system patterned upon European models has been established with the Bank of Japan, a note-issuing institution, acting practically as a bankers' bank and as a state bank somewhat similar to the plan that prevails in England. Japan's coinage system before the war was monometallic, and the Bank of Japan's notes were and are convertible into gold. Public funds are kept in the Bank of Japan, and deposits and withdrawals made after ordinary banking methods. The principal change necessitated by the war was the issue of currency notes by the Japanese Treasury, but the convertibility of the notes of the Bank of Japan has been steadily maintained. Several strong and well-organized commercial banks have been created by special charter in Japan, these including the Yokohama Specie Bank, the Bank of Taiwan, the Industrial Bank of Japan, and various others, while ordinary banking institutions may be incorporated under general legislation which regulates their operation. Foreign banks have always maintained an important position in Japan through the establishment of branches which finance export and import trade, but their relative control over the internal business of the country has of late years declined.

In China, a highly complex and very unstable banking and currency system exists, domestic banks being established in the various provinces, with practically little or no control over them on the part of the government. The Bank of China, which was established a few years ago and was authorized to issue notes, has only a limited lending power and has never reached any very significant degree of development. Many foreign banks have established branches at so-called treaty ports on the coast of China, and their operations are directed largely to financing importation and exportation. These banks have been established from time to time as branches of home institutions operated in various countries and their business has been subject to very little oversight or control. Few of them have issued regular statements, and practically all have been allowed in certain circumstances to circulate notes which have attained a more or less broad field of use, according to the scope of the trade conducted by the merchants belonging to the country under whose laws a given bank was incorporated.

In British India, while there have been many native banks, the principal functions of foreign-trade financing and of ordinary banking business in the commercial sense have been conducted by British institutions either with their home offices in London or in some of the various Indian cities. This has prevented the development on a large or well-organized scale of a definite Indian banking system, although the ordinary needs of the population in general have been met by the establishment of native institutions with branches throughout the country.

In Australia, for many years the banking facilities were provided in much the same way as in Canada, through local incorporation of note-issuing banks or through the establishment of branches by British insti-

tutions with head offices in London. As a result of the organization of banks by these methods some twenty-five main institutions were established in Australia and several of them developed large networks of branches extending throughout the several Australian states. In 1912 the Commonwealth Bank was brought into existence as a government-owned institution whose function was chiefly to handle the funds of the central government. This Commonwealth Bank has tended at times to develop into more or less of a bankers' bank, somewhat after the plan of the Bank of England, but has never yet succeeded in establishing itself fully in that capacity, so that there has always been more or less competition between it and the other local institutions. While the Commonwealth Bank issues notes which have many of the attributes of the government currency, the other Australian banks are likewise authorized to issue notes under the laws of the several states, and do so, the result being to establish a very large circulation of bank notes. Such bank notes, however, are maintained convertible into Commonwealth notes at the various offices of the issuing banks.

VIII. Conclusions.

The hasty survey which has thus been made of foreign systems of banking leads to the conclusion that while there has been no absolutely uniform trend of development in foreign countries, the general movement has been toward the creation of central banks, usually exercising the function of note-issuing and operating more or less as bankers' banks. In most countries such banks are surrounded by a corps of other institutions, which in some cases may be allowed to issue notes, but have ordinarily tended to become deposit banks, either confining themselves to local loans or else

engaging in foreign-exchange operations as well. There is a distinct division between the countries of the world as to the scope and extent of branch banking. The tendency in Great Britain, the British colonies, and in various other parts of the world has been toward the establishment of large networks of branches, with a corresponding concentration of banking power in the home offices of the various institutions which maintain such systems. In other parts of the world branch banking has made less progress, and there has been a considerable tendency toward individualization of banking. This would seem to be true in a number of South American states and also in some parts of the Far East. Among the western European countries, France and Italy have seemed inclined to move in the direction of individualization of banking, or, at all events, have not adopted the branch system in the same highly developed degree as has been true of other countries.

Details of banking organization differ quite materially from country to country, but the tendency has been to give to the government either a stockholding interest or else a very distinct power of control or of operation in the central reserve institution of each country, while other banks have for the most part been left in the hands of individuals, the government's control over them being expressed either through general banking laws designed to prescribe operations which may or may not be embarked upon, or in part through more or less frequent examination and inspection of accounts. The United States stands out separately from the rest of the world in having prohibited the branch system within the country, and consequently as having sought the development of a highly individualized system of banking units, which, however, are now united, through the stock ownership of the twelve Federal Reserve banks, into a co-operative system.

CHAPTER XXIV[1]

EVOLUTION OF THE AMERICAN BANKING SYSTEM

WHILE there is not much use in studying banking from the standpoint of ancient history, or in an antiquarian way, it is of considerable importance to understand how existing banking institutions have developed and what is the practice in regard to banking in other countries of the world. It is by such study that the existing banking problem is properly apprehended and that the foundation is laid for a suitable understanding of what should be done in the way of legislation for the improvement of present methods.

The nineteenth century is a period exceedingly rich in banking experience. During that century a great variety of banking methods were tried, and theory after theory was taken up, applied, and discarded. So also in the matter of practice a great transformation was brought about and banking methods were almost revolutionized. This makes the banking history of the nineteenth century of very great value to the student of the subject from the practical standpoint.

In the United States, a review of banking history will show that many of the numerous schemes and proposals now brought forward from time to time as original have been tried, worked out, and thrown aside. Here and there a good plan or system has been discarded for inadequate reasons, and an outline of past

[1] Material for this chapter has been largely drawn by permission of the publishers (La Salle Extension University, Chicago, Illinois) from the 1916 edition of *American Banking*, by H. P. Willis.

efforts shows why the changes then introduced were unwise and why a return to some methods then abandoned may be beneficial.

I. First and Second Banks of the United States.

When the government of the United States was first organized it found that banking institutions were almost entirely lacking in this country. Owing to the bad condition of the currency and the disorganization of commercial credit, there was a strong desire that the government should participate actively in restoring business to a condition of greater soundness, and particularly that it should aid in establishing a banking system upon a working basis. At that time the dominant banking idea in European countries was that of large chartered banks standing close to the government. There was such an institution in England, and Alexander Hamilton, who was the conspicuous figure in our government so far as concerned all matters of finance, recommended the establishment of a strong institution of like kind to handle the finances of the government, issue bank notes, and generally act as a conservative and unifying influence in the financial system of the country. Such a bank was chartered and went into operation in 1791. This was the First Bank of the United States. A twenty-year charter was granted to it. This charter followed very much the same lines that had been recommended by Hamilton in his famous report. The details, of course, were shaped in Congress to suit the necessities of the situation, but the main ideas are clearly recognizable.

The bank was given a capital of $10,000,000 divided into 25,000 shares of $400 each. Of this sum $8,000,000 was open to subscription by the public, while the other $2,000,000 was to be subscribed by the United States

and paid in ten equal annual installments, with interest at 6 per cent. The subscriptions to the stock were to be paid one-fourth in specie and three-fourths in government 6-per-cent bonds. Each shareholder was entitled to cast one vote for one share, one vote for the next two shares, etc., up to thirty votes, which was practically the maximum vote that could be cast by any one man. The power to inspect all the affairs of the bank except the accounts of private individuals was given to the head of the Treasury, and he was also authorized to call for reports as often as once a week if he chose. The notes were made receivable for public dues as long as they continued to be payable in gold and silver. The bank was allowed to establish branches wherever the directors thought fit, but only for discount and deposit. No trade of any kind could be engaged in, and the bank was not allowed to hold real estate, though it might lend on mortgage security, while it was not permitted to become indebted for an amount greater than its deposits. This practically limited the issues of notes to an amount not in excess of the capital stock. The bank was to transact the fiscal business of the government, and in return it was given an exclusive charter for twenty years.

The capital of the bank was almost instantly subscribed, and the institution promptly went into operation. It proved to be a great success, rendering the currency of the country much more stable, supplying the needed banking accommodation, and providing a note currency which was on the whole quite satisfactory. It was very successful in controlling the state institutions and assuring prompt payment of their obligations, especially of the circulating notes issued by them. In transacting the government's business, making loans as desired, etc., it met the necessities of the situation very satisfactorily.

There was, nevertheless, a considerable opposition to the bank from the first, and this grew stronger as the time came for the expiration of the charter. The bank stockholders were of course desirous of continuing, and as early as 1808 they petitioned for a renewal. Their application was supported by Secretary of the Treasury Gallatin, who showed that the government had made a handsome profit on its stock, besides earning dividends averaging 8 3-8 per cent per annum. The bank was in an exceedingly strong position at this time, as it had on hand about $5,000,000 in specie, while its loans and discounts were $15,000,000, and consisted chiefly of short-term paper. The opposition was due to the fact that a large proportion of the shares was owned abroad, and that the profits, therefore, went to foreign stockholders, while the antagonism of the state banks, which had been growing in number, was very strong. After a bitter struggle, Congress declined to renew the charter, and the bank went out of existence at the expiration of the original charter in 1811.

It was an unfortunate time at which to make a change in the system of banking. The War of 1812 was on the point of breaking out, and the government had reached a stage where it more than ever needed the aid of a strong financial institution. The removal of the First Bank of the United States took away the check that had been imposed upon the small state banks, and the result was that their issues were largely inflated during the years immediately following the cessation of the bank's operations. Added to this was the fact that the government speedily fell into a condition of disordered finance and was obliged to borrow from the state banks and then to sell bonds wherever it could, finally resorting to issues of so-called "treasury notes," which were really small United States bonds

that ultimately degenerated into a kind of currency. Finally conditions became so bad that proposals were put forward for the organization of a new bank of the United States; and after the failure of several proposals of this sort Congress succeeded in passing a new charter in 1816.

The Second Bank of the United States was modeled very closely upon the plan which had worked so successfully in the case of the First Bank. The capital was $35,000,000, one-fifth to be subscribed by the government, while one-fourth of the public subscriptions was required to be in coin and three-fourths either in coin or government securities. In order to be assured of an exclusive charter for twenty years, the bank was to pay the government a bonus of $1,500,000. Public deposits were to be made in the Bank of the United States unless the Secretary of the Treasury should order otherwise, laying his reasons for such order before Congress at its next session. In the event of failure to pay notes or deposits on demand in specie, the bank was to be obliged to pay 12 per cent annually on the amount of its obligations thus refused.

There was no trouble in selling the shares, but when they had been sold the subscriptions came in slowly. The original charter had provided that individuals should pay their subscriptions 30 per cent when subscribing, 35 per cent in six months, and 35 per cent in twelve months. When the time came for the payment of the second installment the specie came in only to a small extent, and when the third installment fell due very few of those who owed it met their obligations on time. The bank discounted the notes of stockholders to a large amount, and made loans on its own shares to a substantial extent.

The effect of all this was to throw the institution

practically into a condition of insolvency, and it required strenuous effort to get back to a working basis. Such a basis was, however, established by 1819, and, through an arrangement with the leading state banks, resumption of specie payments (which had been suspended during the War of 1812) was accomplished. From the time that the bank was placed in safe hands, however, it began to apply a rigid system of control to the state institutions and insisted on their keeping their notes redeemed in coin upon presentation. Branches were established here and there as needed, and the note currency issued by it became a practically universal circulating medium. Although the bank carried on various operations that were probably outside the scope of its charter and did not conform altogether closely to the limitations with respect to methods of issuing circulating notes, it was undoubtedly the most powerful and best-managed financial institution the country had seen, and its effect was to supply a far greater soundness and a far higher degree of convenience and efficiency in making payments than had ever before been experienced.

The Second Bank, however, like its predecessor, fell into difficulties because of political opposition. There was, as usual, the antagonism of the state banks, which were restive under the restraining authority of the overshadowing federal institution and desired to see it done away with that they might get more business and be freer to do as they chose. Besides this there were large general influences of a political character militating against the bank, and the persistent opposition of President Jackson focused all this antagonism in an irresistible way. A recharter was consequently refused, just as in the case of the First Bank.

The bank then, in 1836, obtained a charter for thirty years from the state of Pennsylvania, thus becoming a

state institution and retaining its original $35,000,000 of capital. Up to this point the bank had occupied a thoroughly sound position, but it now found itself with too large a capitalization for the more restricted field in which it was compelled to operate. The result was that loans of doubtful character were undertaken, and finally the bank was obliged to suspend and go into liquidation in 1841.

The experience of the First and Second United States banks is of great interest at the present time on account of the tendency toward centralized banking control. It should be noted, of course, that both the First and Second United States banks were institutions decidedly of a different type from any that exist or would be likely to exist at the present day. Thus, in 1834, when the Second Bank of the United States was in an exceedingly flourishing condition, its loans were $55,000,000, deposits about $11,000,000, circulation about $19,000,000, and specie about $10,000,000. It thus had approximately one-third of its circulation and deposits in the form of specie, while circulation was well toward double the amount of the deposits. This is undoubtedly a different condition from that which would be exhibited by any such bank at the present time. Its methods of doing business were also radically different from those that would be followed to-day. The lessons that can be obtained from the history of the First and Second banks do not lie along the line of routine banking business, but are rather to be found in connection with the type of government control and the relation between the central banks and the local banks.

It is plain that political questions will always be of considerable importance in connection with any government bank, and, as in the case of the First and Second banks, they proved destructive, so they might wreck any governmentally controlled central bank.

Whether these questions would be rendered easier of solution by allowing the small local banks to own the stock of the national bank, and thereby eliminate their jealousy in a measure as well as some portion of the political controversy connected with such an institution, is a doubtful point.

The experience of these central banks showed that very excellent results could be obtained by giving to such an institution the management of public funds and intrusting it with the duty of making transfers and carrying on those portions of the fiscal duties of the government that are distinctly of a banking type. Experience with both these banks also showed the good results that can be obtained through the issue of a uniform bank-note currency, elastic in character, but amply secured by sound, short-time commercial paper accepted in the course of an exceedingly conservative loan and discount business.

II. Development of State Banking.

While the Second Bank of the United States had been running its course, the various states had been experimenting with different kinds of banking systems, some successfully and others disastrously. In the course of this experience almost every type of banking was attempted, and the result was the accumulation of a great fund of experience as to the best way in which not to conduct banking. Among the distinct types of banking systems developed during the first half century of our national life were the so-called New England system, the bond-secured system of New York, the "state banks" (banks owned and operated by state governments or, at all events, very closely controlled by them), and the so-called "credit systems" of banking. Of all these systems the one that stands out

as having been conspicuously successful was that established in New England.

1. New England System.

The New England banks had been chartered by the several states in which they existed, but very shortly came to feel a much higher degree of community of interest and to recognize a much stronger necessity for co-operative action than did the banks of any other section. This led to the development of a certain degree of uniformity in the banking laws of the New England states. As a result, there was a large territory through which a sound and safe state bank currency existed and which formed a striking contrast to the conflicting and largely unsound systems found in other portions of the United States.

The main outlines of this so-called "New England system" were as follows: Banks were allowed to issue notes as they pleased, without any special security behind the note other than the general assets of the institution. As a rule, however, they were forbidden to issue an amount of notes greater than 100 or 125 per cent of the amount of their capital. The capital itself had to be actually paid up within a reasonable length of time, and in some states the stockholders were required to be liable in case of loss to an amount equal to the amount of the capital, or in some cases to a greater amount. In Massachusetts the banks were not allowed to incur liabilities beyond a specified amount, and there was a more or less careful inspection and examination of accounts by state officials. The denominations of the bank notes were quite generally regulated so as to prevent the issuing of too many small notes. In this way a fairly satisfactory degree of state control was secured, and the business of banking was placed upon a very substantial basis. So sound was the

situation that the New England banks were able to maintain specie payments in 1814, when the other banks of the country suspended. They got into trouble in the panic of 1837, but were much less affected than were the banks elsewhere, returning to specie payments and sound methods considerably earlier.

One great element in the success of the New England banks was found in a plan which was not required of the banks by any law, but was the result of voluntary co-operation on their part. This was the so-called "Suffolk system of redemption." The banks had found it hard to maintain constant and steady redemption of notes, and observed that the sounder institutions suffered from the practices of those that were willing to go as far as they could in evading prompt redemption and in resorting to more or less questionable methods. The result was a desire to enforce prompt redemption of notes, and this was accomplished by the so-called "Suffolk system."

Under this system, the New England banks joined in establishing a redemption office in Boston, which was carried on by the Suffolk Bank. This bank was incorporated in Boston in 1818, and a substantial number of the New England banks joined in a plan whereby they made a permanent deposit of $2,000 each with the Suffolk Bank, and in addition such sum as was needed for the current redemption of notes. At first the country banks were unwilling to join the system, because they found that their notes gained a wider circulation when they were at a slight discount, since in the latter case they displaced the notes of the Boston banks, which were naturally held by the people who received them and who presented for redemption the depreciated country notes, these being paid out in the course of ordinary business.

The essential work of the Suffolk Bank, therefore,

was to retire all the country notes it could get hold of and then send them home promptly for redemption. When the system had got fairly started, it was strong enough to retire the notes of large numbers of banks and thus compel immediate redemption, thereby greatly limiting the circulation of the banks that put these notes out. The country banks were finally obliged to yield and to make the required deposit with the Suffolk Bank, which thereafter redeemed their notes at par when presented, charged them up to the banks that had issued them, and sent them home whenever desired.

This system was tantamount to the establishment of a clearing house for note issues and practically offset the notes of one bank against those of another in making settlements. Consequently it was not long before the circulation of all the banks became much less redundant than it had been. Occasionally a bank, irritated by the limitation upon its circulation, withdrew from the system, but in such cases it usually found that its notes fell into discredit and were received only in the immediate locality where it was situated. The Suffolk Bank system thus furnished a striking object lesson of the good effects of prompt redemption of bank notes, and this was exceedingly influential in later banking legislation.

2. New York System.

Early banking in New York was conducted on the same general plan as in the first banks of New England —that is, without any specific security behind the notes. Charters were granted on a somewhat political basis by the legislature during the early years of the state, but a considerable number of defects appeared, just as was the case in New England prior to the development of more uniform legislation there and the

institution of the Suffolk system of redemption. As about thirty bank charters were to expire between 1829 and 1833, it was considered a favorable opportunity for introducing a change. The result was the adoption of what was called the "safety-fund plan," the banks being rechartered under this system. By the plan proposed, each bank had to pay to the Treasurer of the state an amount equivalent to one-half of one per cent of its capital stock until it had paid in 3 per cent of its capital. This then was treated as a joint fund to make good the liabilities of any insolvent bank if its assets were inadequate.

The fund proved to be insufficient during the difficult years after 1837, and, consequently, in 1842, the money was made applicable simply to the notes of insolvent banks, the other liabilities being left to be paid out of the assets. This brought the liabilities that might become a charge against the safety fund more nearly within the control of the fund itself. There had been some opposition to the safety-fund plan; and, as a result of a campaign for "free banking," the New York Legislature passed the "Free Banking Act" on April 18, 1838.

Under this Act any group of individuals might establish a bank and issue notes, but they could get the notes only from the state Comptroller after depositing with him bonds of the United States or the state of New York or of any other state approved by the Comptroller, while, under certain circumstances, they could also issue notes secured by bonds and mortgages upon improved productive real estate. There was a considerable development of banking under this law, but the note issues had very little elasticity, and were not as satisfactory as those of the safety-fund banks. The system was gradually perfected, however, until the

notes protected by special deposits of securities were very safe.

3. "State Banks."

The success of the First and Second United States banks naturally led to the growth of imitations, and in a number of states banks modeled upon the federal institutions were established. Thus the states of South Carolina, Ohio, Indiana, and some others created institutions some of which proved decidedly successful.

Perhaps the best example of banks of this kind was the institution established by the state of Indiana in 1834. This bank had a capital of $1,600,000, one-half owned by the state and the other half by private individuals, though the state was in full control. One parent institution at Indianapolis and ten branches, each with a capital of $160,000, made up the organization. The parent bank did no business, but consisted merely of a president and board of directors who controlled the operations of the branches which thus constituted a system of banks. The management of the bank was throughout careful and scientific, and the profits were very handsome. The bank made its loans largely through the issue of notes and these notes were redeemed in specie upon presentation. The hostility of politicians led to the discontinuance of the bank, and a free banking system was established.

Other state banks worked along very much the same lines, and wherever the management was honest and careful and the capital was bona fide, the result was successful. In various cases, however, banks were established without adequate capital, their chief assets consisting of state securities which were of doubtful value and their specie being limited in amount. In other states imitations of the New York free banking system, with requirements based on the compulsory deposit of

bonds or mortgages with the state authorities, were not infrequent, and of course did not produce notes of greater soundness than the securities on which they were based. Thus a great many unsound banks issuing "bond-secured notes" came into existence. They were no worse and no better than the banks that were established after the New England plan, issuing notes based on the general assets of the institutions, but unprotected by any special deposit.

Out of all these conflicting systems there developed a gradual tendency toward better banking conditions and wise management. After the discontinuance of the Second Bank of the United States there ensued a severe panic, starting in 1837, and due in part to unwise banking and the undue extension of credit upon improper or inadequate security. The result was to enforce the banking lessons that had already been afforded and to warn the banks against repetition of the practices which had led to inflation and disaster. There was a gradual improvement in methods between 1840 and 1860. But the evils of a decentralized, widely diffused, and uncontrolled system of banking continued to exist.

At the opening of the Civil War there were more than 1,600 kinds of bank notes in circulation. Counterfeits were numerous and, except for voluntary arrangements made by groups of banks among themselves, there was nothing to compel any bank to receive the notes of any other bank. Redemption facilities were crude and poor throughout most of the country, and there was a strong feeling in favor of some change in the direction of more powerful central control that would guarantee a more uniform note issue. The need of such control was emphasized by further banking difficulties in 1857, which, although by no means so severe as those of preceding periods of panic, were, nevertheless, disturbing.

III. Independent Treasury System.

Meanwhile the government, discouraged and annoyed at the experience it had had after the discontinuance of the Second Bank of the United States, had established the so-called "independent treasury system." Prior to this an effort had been made to fall back once more upon the state banks, the deposits of the government formerly kept with the Bank of the United States being apportioned or distributed among a number of banks. The panic of 1837 and the resulting suspension embarrassed the government and enforced the necessity of getting some plan that would retain the funds under real and genuine control of the federal administration. After various expedients had been suggested and their adoption had been unsuccessfully sought, Congress created the independent treasury system which assumed substantially its present form in 1846.

The idea of this system was that the government should entirely dissociate itself from the state banks and should pay only coin and receive only coin. Whenever it had a surplus of money on hand, such funds were to be kept in specie in vaults provided for that purpose. It was reasoned that this would keep the government entirely independent of the banks and their vicissitudes. The system was put into operation and was carried on with fair success down to the opening of the Civil War. During that time expenses and incomes were not far from being in a condition of equilibrium, and the system worked with comparative smoothness.

It was evident, however, even at that comparatively early date, that conditions might easily arise under which the subtreasury system would not be feasible. It was seen that, should there be a heavy surplus, it

would inevitably operate to draw out of the circulation and out of the banks a substantial percentage of the money of the country, retiring it from use until such time as the government should see fit to pay it out again in the ordinary course of its business. Because the amount of government transactions was not very large, and because taxes were correspondingly light, while a fair adjustment of revenue to expenditure had been obtained, this was not an immediate or pressing question, but every observer closely familiar with the conditions recognized that such a situation might easily develop, and that the subtreasury system would then become an extremely difficult means of managing the fiscal affairs of the government. The Civil War, therefore, found the government with its fiscal system entirely divorced from the banking system of the country and with the banks disorganized and subject to no uniform or joint control.

At the opening of the Civil War it was promptly seen that very definite fiscal expedients would have to be adopted. The customs duties fell off as soon as the war came on, and, as these had been the principal source of revenue, the federal administration was sadly in need of funds. It undertook to borrow money from the banks, and then, although Congress had granted permission to suspend the Independent Treasury Act in certain respects, the administration insisted on drawing out the installments of the loan from the banks which had agreed to make it. The banks had expected that, instead of being compelled by the Treasury to pay coin as they would under ordinary circumstances have had to do, they would be allowed to keep the funds on deposit in their vaults and simply transfer them at the government's order to public creditors. The effect of drawing off the specie from the banks and placing it in the Treasury was to weaken the reserves

and finally to lead to a suspension of specie payments, the banks refusing to pay out gold or silver on demand.

Meanwhile the necessities of the government had been mounting very rapidly, and it had been unwisely determined to issue legal-tender Treasury notes (popularly known as "greenbacks"). The first issue of these notes came out in 1862 and was followed by other issues. As the notes were legal tender they could be used in redeeming bank notes. They took the place of gold and silver coin, these metals being retired from circulation and hoarded or exported. The result was that the country was speedily placed on a basis of irredeemable paper. It was now without a metallic circulation, without any large financial institution on which to fall back, without any uniform bank-note currency, and without any substantial control over the banks. The constant and enormous demand for funds with which to carry on the war could not be satisfied by any other means than huge loans on long time, accompanied by heavy taxation designed to supply the funds for paying the interest on the bonds and ultimately redeeming them as they fell due. In endeavoring to sell such bonds the federal government encountered lamentable difficulty and was driven to various expedients for pushing the securities into the hands of buyers.

Among other schemes that suggested themselves to the Treasury authorities was that of organizing a banking system similar to the free banking system of the state of New York. The basic idea of this system was that of allowing the banks to issue notes, on condition that they should deposit with the Treasury securities in proper amount to protect the notes they issued. It was supposed that by requiring them to buy United States bonds to serve in this capacity, the government might create a strong demand for such bonds and that, as a result, it would be found easier to sell the

securities, while their price would probably be proportionately better.

On the other hand, it was argued, this system would be so popular that the state banks would be unable to compete with it. They would rush into the system, and consequently the country would be supplied with a uniform currency, issued by a set of banks directly under the control of the national government, responsible to that government and purchasing its bonds as a basis for the issue of its notes. This was the fundamental idea upon which the present national banking system was based. It was designed primarily as a device of national finance rather than as a service to industry.

IV. National Bank Act.

The first Act "to provide a national currency secured by a pledge of United States stock and to provide for the circulation and redemption thereof" became a law February 25, 1863. This was found defective in some particulars and was amended during the following year. The Act contained most of the provisions which had been found necessary in the experience with state banks during preceding years. It provided for inspection and examination on the part of the federal government through a currency bureau; for the maintenance of reserves, the redemption of notes over the counter of the issuing bank and at agencies in certain principal cities; for the conversion of state banks into national banks; for the deposit of public moneys in banks, when necessary, upon security of United States bonds; for the taxation of the banks, and numerous other points, some of the more important of which have already been mentioned in foregoing discussions.

The striking feature of the Act was seen in the pro-

visions which controlled the objects for which it had been created and which governed the methods of note issue in a certain degree. The banks were required to buy government bonds as an incident to their receiving charters. At least 25 per cent of the amount of the capital had to be put into government bonds by the smallest class of banks. This requirement became smaller as the capital of the bank became larger, and in the large banks the amount of bonds bought was a comparatively small percentage of the capitalization. Notes could be issued to the amount of 90 per cent of the par value, but not exceeding the market value of the bonds held by the institution, such bonds being in any event deposited in trust with the Treasury Department. The amount of notes to be issued in the aggregate was, however, limited to $300,000,000, and this amount was apportioned to the several states according to population and existing banking conditions.

With the comparatively rigid restrictions imposed by the Bank Act, with the requirement that bonds be purchased, and with the necessity incumbent upon state banks that they change their names before entering the system, the existing institutions were somewhat slow to give up their old charters and reorganize under the national law. The effect of this hesitation was to prevent the banks from rushing into the new system as they had been expected to. Late in 1864 there were only 584 banks in the system, and they had outstanding a circulation of only $65,000,000. The results which were expected in the way of a demand for United States bonds originating with the national banks were consequently not realized.

The national banking system did not materially influence the demand for bonds, but the advantages arising out of the creation of a uniform currency were more and more generally recognized, and various ad-

ministrators, who at first had opposed the plan, became advocates of it. Some went so far as to urge that legislation be adopted whereby state banks would practically be compelled to cease issuing notes, and in harmony with such recommendations Congress in the Act of March 3, 1865, imposed a tax of 10 per cent on state-bank issues, beginning with July 1, 1866. Thereafter the banks came into the system much more rapidly, and there was a considerable drift away from the state banking systems. It was speedily perceived, however, that the state systems, even without the power to issue notes, had a place of their own. Some of the strongest state banks preferred to retain their charters under state laws and to go on doing a discount and deposit business.

V. Development of the National Banking System.

The power to control note issues, and the prestige resulting from federal supervision, however, gave the national banks the lead, and from 1866 onward they were rapidly organized, extending into the South as soon as the Civil War had closed. Great difficulty was experienced in consequence of the limitation of the note issues to $300,000,000 in the aggregate. In 1866 the national-bank circulation amounted to about $280,000,000. This sum was very badly distributed. The wealthier and older parts of the North had secured a large share of the notes. In New England much more than the due proportion belonging to them had been acquired by the banks, while the South was unable to get much currency, notwithstanding that it was sorely in need of some notes to take the place of the Confederate currency which had driven out specie. The maximum limitation had been set partly because Congress feared that in a time of suspension of specie

payments such as then existed throughout the country, permission to issue notes up to any amount of bonds that the banks might deposit (not exceeding their capital) might lead to an overissue of bank notes, which would operate still further to postpone the date of redemption.

The national government was, therefore, not willing to relieve the shortage of currency by removing the limitation, but finally sought to help matters somewhat by enlarging the maximum limitation to $354,000,000, while it was further provided that $25,000,000 should be withdrawn from those states that had more notes than their share and issued to banks and states which had less than their share. The provision was so complex, and the rate of interest was so high in the South and West as compared with the comparatively low interest earned on the bonds which had to be deposited in order to get the notes, that there was relatively little disposition on the part of the Southern and Western banks to act under the law of 1870. In fact, this demand was so slack that it did not prove necessary to withdraw the $25,000,000 in notes from banks that had more than their proportionate share.

When Congress finally got to the point, in 1875, where it felt able to provide for the resumption of specie payments, it also dealt with the bank-note question by repealing all limitations upon the issue of bank notes to any amount, subject to the general limitations and requirements of the law with reference to bonds and capital. This change helped the situation considerably. There was a decided increase in the development and prosperity of the national system, and, on the other hand, a decided growth of opposition sprang up. The system was, however, by this time thoroughly well established, and, after the resumption of specie payments in 1879, the notes of the banks were

equivalent in value to gold, and provided an unquestionably stable and satisfactory currency so far as questions of safety and security were concerned. Changes, however, had occurred in the fundamental basis upon which the national banking system was founded, and the result was a tendency to decrease the amount of circulation outstanding.

As has been seen, the banks were required to deposit $100 in bonds for every $90 which they received in notes. Supposing the bonds employed for this purpose bore 6 per cent, it is plain that a bank that had $100 in gold coin or other legal-tender money could (if the bonds were at par) buy $100 in bonds, thus getting 6 per cent interest thereon, deposit the amount with the Secretary of the Treasury, receive back $90 in notes, and then lend these notes to borrowers at such a rate of interest as they were willing to pay. The following of this plan led in some quarters to the bringing forward of an argument now very familiar—that banks, by reason of the bond deposit system, were able to make a "double profit," inasmuch as they got the interest on the bonds and the interest on the notes.

As a matter of fact, there was no foundation for this complaint. A "double" profit is what every banker has to make in order to pay the special expenses of banking, otherwise he might as well use his capital in loans on real estate or other security. If the banker had $100 in gold to start with, he would do very much better for himself were he to use the cash as a reserve and simply make his loans by granting credits on his books than he would were he to follow the plan of buying bonds and getting notes to be loaned. In practice, if the banker were able to lend four times the amount of his reserve he would get the interest on $400 of loans and maintain a reserve of $100 in coin, while in the national system, if he took out notes he

would get the interest on $100 in bonds and $90 in notes, even if he did not have to supply a reserve behind these notes—which, of course, he would be obliged to do, either in the form of a redemption fund with the Treasury or as a cash reserve in his vaults.

It is obvious that the higher the price of the bonds went, the less would be the profit to be derived from notes, since, under the original National Act, the banks could get only 90 per cent of the par value. Thus, if bonds stood at 125 it is clear that the banker would have to spend $125 in order to get a bond whose par value was $100 and on the strength of which he could get only $90 in notes. This would mean that there was a margin of $35 between the amount paid for the bond and the amount of notes obtained, on which there was no return. During the years after 1870, the price of bonds steadily rose, and this process was accelerated after 1875, when resumption was decided on.

A further influence tending to stimulate the price of bonds came from the redemption of portions of the debt out of surplus revenues. Not only did the issue of circulation become less profitable to the banks, but they also saw opportunities for making a substantial profit by selling their bonds at the higher prices that had become the rule. Under the influence of these conditions, the national circulation, which had risen to about $350,000,000 at the end of 1873, fell off nearly $50,000,000 during the succeeding three years. Subsequently there was a slight expansion, and then the reactionary movement set in once more. In 1879—the resumption year—the circulation was only $323,000,000.

Congress was now under the influence of the anti-banking sentiment which had developed throughout the country, and in 1881 passed a bill requiring 3-per-cent bonds which were to be issued for the purpose of

refunding the national debt to be used by the banks as security for circulation. Other provisions in the Act would have made it difficult or impossible to reduce circulation any further, and the result was a sharp retirement of notes in anticipation of the passage of the law. The measure was vetoed, but, while a good many bonds that had been withdrawn were redeposited, the movement toward the curtailment of circulation had now definitely begun.

VI. Growth of a Government Surplus.

The curtailment of bank currency under the national system which had started in consequence of the natural causes already set forth, which grew out of the greater prosperity of the country and the more stable condition of its finances, was now to be still further aided as a result of the growth of a great government surplus. The Treasury had been buying bonds, and thereby reducing indebtedness, during the later 'seventies as occasion offered. But the process went forward even more rapidly after 1880. Revenues were abundant and largely in excess of the amount needed for government expenses. Consequently, under the independent Treasury law whose features have already been noted, only two uses could be made of these excess funds. They might be kept on hand in money in the vaults or they might be deposited with the banks. The latter operation, however, necessitated the depositing of government bonds with the Treasury as security.

It was found that if the Treasury used the surplus funds to buy up issues of bonds in the market before they were due, it raised the price of the bonds so high that it became expedient for the national banks to sell as many of their bonds as they could and reduce their circulation to as low a point as possible, while if the funds were

deposited in the banks the latter were obliged to buy the bonds in order to use them as security with the Treasury for the holding of the deposits. They thus raised the price of the bonds in the market through their own action, and made it unprofitable for themselves to use such bonds for the maintenance of outstanding circulation. During the years 1881–91 the bonded debt of the United States was cut by more than $1,000,000,000. The price of the bonds rose tremendously, and in 1891 the lowest average price was more than 124. The effect of these changes was very soon perceived in the national-bank circulation, which dropped from $323,000,000 in 1879 to $173,000,000 in 1892. It almost seemed as if the issue of notes would be cut to the absolute minimum corresponding to the volume of bonds required by the law to be deposited as a prerequisite to the existence of the banks.

New conditions set in after 1890. The Tariff Act of that year had been so drafted as to cause a large decrease in the annual net revenue, and it was shortly apparent that, instead of having funds with which to buy more bonds, the government would have to borrow money on new bonds. Conditions were complicated by the silver-purchase policy which had been followed by the government since 1878 and which was carried farther by the silver-purchase law of 1890. This policy contributed to the panic of 1893, although the silver-purchase law was repealed in that year. Issues of new bonds were made by the government during the second Cleveland administration (1893–97), to the amount of some $252,000,000. This and the cessation of the silver-purchase policy and of the issues of notes based on silver by the government somewhat helped the bank circulation to increase, and in 1896 the total notes outstanding had grown to about $214,000,000.

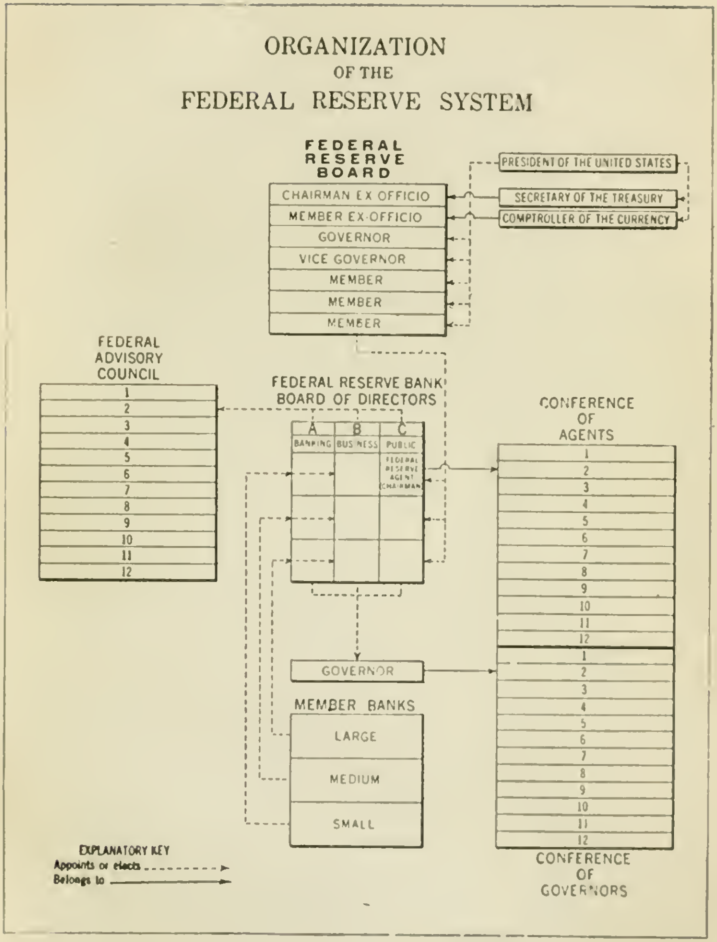
CHAPTER XXV

ORGANIZATION OF THE FEDERAL RESERVE SYSTEM[1]

I. Defects in the National Banking System.

Deficiencies in the national banking system were perceived comparatively early in its history, but did not make themselves felt in a way so serious as to enlist active effort for their correction until about twenty-five years after the system had first become operative. Moreover, during this period of twenty-five years the difficulties which were most seriously felt were not those that afterward caused most annoyance and led to most active effort for improvement. Probably the first inconvenience that was experienced in the management of the national circulation after the national banking system had been definitely created and the Act had been amended to meet the earlier requirements of the conditions then existing, was the prospect that the supply of government bonds available at prices that would enable the banks to put out circulation based thereon would be insufficient. In 1880–83 this problem, as seen at an earlier point, had become acute, the twenty-year bonds which had been issued by the federal government during the Civil War at 5 and 6 per cent interest expiring, and the question what should be done in connection with them being unsettled. The problem was disposed of by refunding the bonds for another twenty years and thus enabling the national banks to get the securities they needed as a basis for

[1] Adopted in part from "The Federal Reserve" by H. P. Willis, by permission of the publishers, Messrs. Doubleday, Page & Co.


ORGANIZATION
OF THE
FEDERAL RESERVE SYSTEM
FEDERAL RESERVE BOARD
CHAIRMAN EX OFFICIO
MEMBER EX-OFFICIO
GOVERNOR
VICE GOVERNOR
MEMBER
MEMBER
MEMBER
PRESIDENT OF THE UNITED STATES
SECRETARY OF THE TREASURY
COMPTROLLER OF THE CURRENCY
FEDERAL ADVISORY COUNCIL
1 2 3 4 5 6 7 8 9 10 11 12
FEDERAL RESERVE BANK
BOARD OF DIRECTORS
A BANKING
B BUSINESS
C PUBLIC
CONFERENCE OF AGENTS
1 2 3 4 5 6 7 8 9 10 11 12
GOVERNOR
MEMBER BANKS
LARGE
MEDIUM
SMALL
1 2 3 4 5 6 7 8 9 10 11 12
CONFERENCE OF GOVERNORS
EXPLANATORY KEY
Appoints or elects
Belongs to

their circulation. With the growth of the great surpluses of revenue during the decade 1880–90, a new type of problem appeared; for the purchases made by the Treasury Department, in order thus to use up the surplus, had brought the bonds to a premium and made it questionable whether the maintenance of the circulation on a satisfactory basis providing for the issue of enough of the notes would be feasible. Discussion of the question was, however, only sporadic. The national system was proving itself in so many ways better adapted to the needs of the country than the system of banking which had preceded it, that comparatively few persons were disposed to attack it seriously.

The difficulty in getting an adequate supply of notes had been making itself more and more felt prior to that time, and when the panic of 1893 came on this phase of the problem became suddenly very acute. During the panic of 1893 there was a tremendous shortage of currency and many expedients had to be resorted to for the purpose of supplying even the bare necessities of the country for a circulating medium. Not only clearing-house certificates, but a great variety of forms of local obligations which serve as currency substitutes, were injected into the circulation from time to time, and served as a means of relieving the strain upon national-bank notes. As for the national-bank notes themselves, it was almost out of the question to obtain sufficient amounts of them. Even when a national bank had deposited its bonds with the Treasury and had made application for notes, fully three weeks were necessary in order to get delivery of the finally completed currency. This delay was necessary in order that the notes might be printed, dried, and shipped to their destination. The process of signing them and putting them out required more time. Altogether, the delay involved in making the

currency available was so great that the experience of the panic convinced practically all observers of the unsatisfactory nature of the prevailing system for issuing notes as a practical matter, entirely independent of the question whether the method of note issue provided in the National Act was or was not theoretically satisfactory or desirable.

II. The Baltimore Plan.

The result of these events was to draw the attention of American bankers toward the practice of other countries. Many persons believed that the past experience of the United States with so-called central banking, as exemplified in the history of the First and Second banks of the United States, had been such as practically to put resort to such expedients out of the question. The Canadian Bank Act, which had been lately revised, offered as its most striking feature, from the standpoint of American bankers, an issue of currency protected by a joint guaranty fund contributed by all of the banks. At a meeting of the American Bankers' Association in 1894, at Baltimore, a plan of a somewhat similar sort was advocated. This was designated as the "Baltimore Plan," and became to many minds synonymous with what has long been called "currency reform." Unsatisfactory conditions in the currency situation had their share in contributing to the growth of the silver agitation, but the presidential campaign of 1896 turned almost entirely about the question of remonetizing silver. Discussion of banking and currency, as distinct from that relating to the standard of value for money, practically disappeared in the struggle over silver. Immediately after the election of President McKinley, however, an effort was made by business men and bankers throughout the

country to direct attention once more toward the question of an appropriate note issue. Legislative leaders, nevertheless, showed almost complete indifference to the whole subject, and the "currency reform" movement after 1896, therefore, naturally became an effort to secure definite gold-standard legislation, and only incidentally improvement of the banking situation.

III. Indianapolis Currency Commission.

The most notable movement of the four years from 1896 to 1900 was that embodied in what was called the Indianapolis Currency Commission. This was a body appointed by a convention of boards of trade and commercial organizations generally, which had met at Indianapolis, Indiana. The commission did its work largely in Washington, and ultimately issued a report which called for three principal changes in existing legislation: (1) The definite establishment of the gold standard; (2) the separation of the gold fund protecting greenbacks or United States notes in the Treasury Department from the other funds of the Treasury, with provision for reconstituting this fund by the issue of bonds; and (3) the issue of bank notes based upon commercial paper and duly protected in various ways.

IV. Gold Standard Act.

It is probable that this report would have evoked immediate action by Congress to some effect had not the Spanish-American War intervened. The close of the war found the United States approaching another presidential election. Congressional leaders then hastily framed a measure known as the gold-standard law of 1900, which became a statute on March 14th of that year. In this gold-standard law provision was made for the segregation of the funds of the Treasury, so that

$150,000,000 should always be available behind the greenbacks, and authority was given to the Secretary of the Treasury to sell bonds for the purpose of re-establishing this fund if at any time it should fall below $100,000,000 fixed for it. The Act declared the standard of money in the United States to be the gold dollar, although it was defective in making no provision for the redemption of the silver dollar in gold or for the issue of bonds to maintain parity. Outstanding bonds were to be refunded into 2-per-cent consols, and these 2-per-cent bonds were made available to protect national-bank currency. Prior to 1900, $50,000 had been the minimum capitalization of a national bank, but the new Act reduced this sum to $25,000 in towns of 3,000 inhabitants. This reduction and the issue of the 2-per-cent bonds were expected to enable country communities to organize national banks and take out the currency they needed. The fact that prior to 1900 the outstanding bonds had brought a large premium, while banks could obtain only 90 per cent of the par value of their bonds in currency, had made it unprofitable for the banks to issue. For example, if a bank had to pay for $100,000 of government bonds, say, $112,000, while it could get only $90,000 in currency, there would be a gap of $22,000 between the currency and the amount invested in bonds, on which the bank was likely to suffer loss. Shrinkage in bond premiums and the fact that this amount of money was not definitely employed in any way, except for the interest on the face of the bonds, made the issue unsatisfactory to the banks. Therefore the new law allowed the banks to get in notes 100 per cent of the face of their bonds or market value if below par. The Act of 1900 made, however, no provision whatever for notes based on commerical paper, nor did it render the prompt issue of the notes any easier than before. It was never-

theless successful in stimulating the organization of national banks, and the number in existence rapidly increased, especially in the group with $25,000 capital. The outstanding bonds were rapidly converted into the new 2-per-cent bonds, and these were taken up by the new banks. The small banks, especially, were disposed to take out circulation up to the level allowed by law, and became strong buyers of 2-per-cent bonds.

Under the Act of 1900 the needs of the country for currency were more or less fully met. Business was prosperous and there was a general expansion of operations and of prices. The Act of 1900 had not, however, met any of the real requirements of banking and currency reform. Although the previous prosperity and the apparent remoteness of panic had led to a slackening of interest on the part of many commercial and business interests which had previously urged banking reform, scientific students of the situation did not reduce their efforts, and nearly every year a succession of new bills made their appearance in Congress. The striking feature of this second period of agitation may be said to be the recognition of the fact that a mere reform in note-currency issue methods would not meet the needs of the case. Both the experience of foreign countries and of the United States, as well as closer analysis of the contemporary experience of Canada, showed that such was the fact, and emphasized the necessity for a more thorough and far-reaching type of legislation than had yet been afforded.

V. Effect of Panic of 1907.

Notwithstanding the apparent prosperity of the country, there were signs of danger in the inflation and unsound finance that prevailed during the period, and these, at about the beginning of the year 1907, had

developed into a state of affairs which portended immediate disaster. Banks were greatly inflated with large lines of credit which they could not liquidate. Business men were unable to pay their obligations. In the late summer it appeared inevitable that there would be a collapse, and this, in fact, occurred in October. The first open symptom of difficulty was noticed in New York, and from there the trouble steadily spread throughout the country. As usual, specie payments were suspended and clearing-house certificates were issued. There was a general shortage of currency, accompanied by many bank failures. In order to relieve the situation, Secretary of the Treasury Cortelyou and Comptroller of the Currency Ridgely did all in their power to enlarge the volume of bonds available for the purpose of carrying the new national-bank notes. At the opening of the panic it seemed as if all the available bonds had already been deposited with the Treasury to secure national-bank notes or else to protect public deposits. As public deposits with banks were then very large, the amount of bonds thus rendered unavailable as a basis for bank-note issue was likewise considerable. The Treasury Department ruled that other securities might be substituted for national bonds behind public deposits, and this released a good many national bonds, which were then transferred to circulation account, thereby providing for the issue of an additional supply of notes. In this way considerable enlargement of the circulation was obtained, but, as on former occasions, the assistance came too late to do very much good.

VI. The Aldrich Bill.

It was strongly felt that Congress ought to do something by way of relief, particularly as another presi-

dential election was in sight. Consequently, in the spring of 1908 a bill was reported by the House Banking and Currency Committee and another by the Senate Committee on Finance. The House bill was a measure calling for the issue of currency based on commercial paper, while the Senate plan, speedily known as the Aldrich bill, sought to meet the difficulty by allowing banks to deposit with the Treasury other kinds of bonds in protecting their circulation. The philosophy of the House bill was more complex, being based on the view that what the country needed was a thorough revision of its banking methods, particularly as related to the issue of currency, with a flexible note issue backed by commercial paper. By a legislative maneuver there was now substituted for the original bill a plan which became known as the Vreeland bill, and called for the issue of currency by associations of banks, called at first clearing-house associations on the basis of commercial paper deposited with such associations. The bill was originally incredibly crude, and was changed almost daily for a long period of time. It finally assumed greater feasibility and was passed by the House of Representatives. The Aldrich bill had meanwhile been passed in the Senate, and efforts were now made to adjust and combine the two. Ultimately this attempt resulted in the so-called Aldrich-Vreeland Act of May 30, 1908, which permitted the issue of currency based on commercial paper by associations of banks known as "National Currency Associations," while it also permitted national banks to deposit bonds of specified classes with the Treasury Department and to receive direct issues of currency based thereon. In every case the new currency was made the subject of a very high rate of taxation, it being supposed that this would force the notes to retire rapidly. One feature of the Act was a provision for a

"National Monetary Commission" to consist of Senators and Representatives only. The commission was given almost unlimited power of spending money in furtherance of its inquiry, and was directed to investigate currency and banking conditions wherever it saw fit, and report to Congress what further action was needed.

The control of Congress changed in 1910, a Democratic majority appearing in the House of Representatives, while dissatisfaction with the expenditures of the commission for traveling and publishing began to be expressed. Late in the summer of 1910 Senator Cummins of Iowa succeeded in securing the adoption of a resolution calling for some report by the Monetary Commission within a specified period. In December following the outlines of a bill drafted for Senator Aldrich became known to the public, and shortly thereafter the measure was adopted by the National Monetary Commission. This later became known as the Aldrich bill.

The Aldrich, or Monetary Commission, bill was a lengthy and detailed legislative proposal which had been worked out with the aid of banking authorities, and which presented a plan for the complete reorganization of the banking system of the country. In order to understand the Aldrich bill thoroughly it must be remembered that, as already suggested, it was merely the outcome of a long period of discussion and controversy. The brief treatment to which we are necessarily limited prevents us from considering more than a very few of the antecedents of the bill; but it is important to note that the measure had been preceded by two other proposals of similar character, which had been worked out independently of those who had the Aldrich bill in hand. These were the Fowler and the Muhleman bills. A true understanding

of the Aldrich bill, and what was done in the way of legislation subsequently, can best be attained, therefore, by a brief sketch of these three measures.

The object of the plans presented in these three proposed measures was that of arranging a co-operative organization of the banks of the United States which should serve to afford these banks the means of rediscounting their paper at times when they required assistance or accommodation in order to continue extending loans to their customers, and in order to avoid the curtailment of credit which in the past had frequently resulted in precipitating commercial panics and stringency. The fundamental idea running through the proposals was that of centralizing the control of discounts as well as that of applying a more rigorous method of oversight to the operations of the several banks expected to participate in the new scheme. It was supposed by the authors of these plans that the institution which they aimed to create would accomplish at least the following financial results:

1. Establishment of a more or less uniform rate of discount throughout the United States, and thereby the furnishing of a certain kind of control over bank operations which should be similar in all parts of the country.

2. General strengthening of reserves in order that such reserves might be held ready for use in protecting the banks of any section of the country and so enabling them to go on meeting their obligations instead of suspending payments, as had so often been necessary in the past.

3. Furnishing of an elastic currency by the abolition of the existing bond-secured note issue in whole or in part, and the substitution of a freely issued and adequately protected system of bank notes which should

be available to all institutions which had the proper class of paper for presentation.

4. Management and commercial use of the funds of the government which were then isolated in the Treasury and subtreasuries in large amounts.

5. General supervision of the banking business and furnishing of more stringent and careful oversight.

Other objects were sought, incidentally, in these plans, but they were not as fundamental as the chief purposes just enumerated.

The plans presented a general community of design and similarity of arrangement which was not necessarily the outgrowth of plagiarism or imitation, but had resulted from the facts that some proposition of the same general kind had been under consideration for many years previous, and had commended itself to leading bankers and business experts, and that the idea of combined action had also the support of European experience, nearly every European country being equipped already with a central banking mechanism of some kind. This notion of a central banking mechanism which should economize resources and sustain the several banking units was thus admittedly desirable, provided that various difficulties connected with it could be overcome. It was in overcoming these difficulties and avoiding the embarrassments that necessarily arise from such a proposition that the three plans under consideration, as well as numerous others of the same general description, varied from one another. These variations were of great significance when it was sought to adopt a piece of practical legislation for the purpose of remedying existing conditions; but they were not fundamentally important from the general theoretical standpoint.

The particulars in which the various plans differed

one from another are numerous, but the principal points upon which those who had framed these plans concentrated their attention may be enumerated as follows:

1. Methods of providing capital for the suggested central organization.
2. Relationship between the central organization and branches of the same.
3. Details of the relationship between the institution and its branches, on the one hand, and existing banks, on the other.
4. Relations between the proposed institution and its branches, on the one hand, and the public, on the other.
5. Relations between existing institutions, on the one hand, and the government, on the other.
6. Methods of controlling the proposed mechanism.
7. Details of the lines of business to be transacted by the proposed institution.

Although the Aldrich bill was in a general way in line with what had been often urged and widely talked about both in Congress and out of it, and although it could have been amended in such a way as to eliminate many of the objectionable ideas which had been veneered upon the fundamental basis of banking theory and practice which constituted its substructure, the measure never commended itself to the public. As a matter of fact, it never received consideration at the hands of a committee in either house of Congress, and within a few months after it was introduced the control of both houses had largely slipped from the hands of the political group which was responsible for it. The Democratic party had succeeded the Republican in full charge of the House of Representatives, and a

combination of party groups had practically deprived the conservative Republicans in the upper chamber of Congress of the majority control which they had long exercised there. Upon the Banking and Currency Committee of the House of Representatives fell the duty of examining the great mass of information already collected with reference to currency and banking, of analyzing the data at hand, of simplifying the results thus obtained, and of selecting those which were deemed most worthy to be incorporated into a measure for the reorganization of the banking and currency system of the nation.

VII. Legislative History of the Federal Reserve Act.

1. *Features of the Original Bill.*

Upon the basis of careful investigation, conducted under direction and supervision of that committee, partly at public hearings during the winter of 1912–13, partly by private investigations, it was finally determined what features should and what points should not be embodied into a new banking measure. The bill thus drafted was first submitted to and received the approval of President Woodrow Wilson, and was thus, when introduced in the House of Representatives on June 18th, an administration bill in the sense that it had received the approval of those charged with administrative responsibility, while it had been developed by the authorized legislative agencies of Congress. As thus drafted for presentation, the banking bill covered certain main points, which were subjected to no serious change and which were there succinctly reviewed in a report, submitted to the House on September 9, 1913, by Chairman Glass on behalf of the Banking and Currency Committee, as follows:

After looking over the whole ground, and after examining the various suggestions for legislation, some of which have just been outlined, the Committee on Banking and Currency is firmly of the opinion that any effective legislation on banking must include the following fundamental elements, which it considers indispensable in any measure likely to prove satisfactory to the country:

1. Creation of a joint mechanism for the extension of credit to banks which possess sound assets and which desire to liquidate them for the purpose of meeting legitimate, commercial, agricultural, and industrial demands on the part of their clientele.

2. Ultimate retirement of the present bond-secured currency, with suitable provision for the fulfillment of government obligations to bondholders, coupled with the creation of a satisfactory flexible currency to take its place.

3. Provision for better extension of American banking facilities in foreign countries to the end that our trade abroad may be enlarged and that American business men in foreign countries may obtain the accommodations they require in the conduct of their operations.

Beyond these cardinal and simple propositions the committee has not deemed it wise at this time to make any recommendations, save that in a few particulars it has suggested the amendment of existing provisions in the Nat'onal Bank Act, with a view to strengthening that measure at points where experience has shown the necessity of alteration.

4. In order to meet the requirements thus sketched, the committee proposes a plan for the organization of reserve or rediscount institutions to which it assigns the name "Federal Reserve banks." It recommends that these be established in suitable places throughout the country to the number of twelve as a beginning, and that they be assigned the function of bankers' banks. Under the committee's plan these banks would be organized by existing banks, both national and state, as stockholders. It believes that banking institutions which desire to be known by the name "National" should be required, and can well afford, to take upon themselves the responsibilities involved in joint or federated organization. It recommends that these bankers' banks shall be given a definite capital, to be subscribed and paid by their constituent member banks which hold their shares, and that they shall do business only with the banks aforesaid, and with the government. Public funds, it recommends, shall be deposited in these new banks, which shall thus acquire an essentially public character and shall be subject to the control and oversight which is a necessary concomitant of

such a character. In order that these banks may be effectively inspected, and in order that they may pursue a banking policy which shall be uniform and harmonious for the country as a whole, the committee proposes a general board of management intrusted with the power to overlook and direct the general functions of the banks referred to. To this it assigns the title of "The Federal Reserve Board." It further recommends that the present national banks shall have their bonds now held as security for circulation paid at the end of twenty years, and that in the meantime they may turn in these bonds by a gradual process, receiving in exchange 3-per-cent bonds without the circulation privilege.

In lieu of the notes now secured by national bonds and issued by national banks, and, so far as necessary in addition to them, the committee recommends that there shall be an issue of "Federal Reserve Treasury notes," to be the obligations of the United States, but to be paid out solely through Federal Reserve banks upon the application of the latter, protected by commercial paper; and with redemption assured through the holding of a reserve of gold amounting to 33⅓ per cent of the notes outstanding at any one time. In order to meet the requirements of foreign trade, the committee recommends that the power to establish foreign branch banks shall be bestowed upon existing national banks under carefully prescribed conditions, and that Federal Reserve banks shall also be authorized to establish offices abroad for the conduct of their own business and for the purpose of facilitating the fiscal operations of the United States government. Finally and lastly, the committee suggests the amendment of the National Bank Act in respect to two or three essential particulars, the chief of which are bank examinations, the present conditions under which loans are made to farming interests, and the liability of stockholders of failed banks. It believes that these recommendations, if carried out, will afford the basis for the complete reconstruction and the very great strengthening and improvement of the present banking and credit system of the United States. The chief evils of which complaint has been made will be rectified, while others will at least be palliated and put in the way of later elimination.

The Federal Reserve banks suggested by the committee as just indicated were to be in effect co-operative institutions carried on for the benefit of the community and of the banks themselves by the banks acting as stockholders therein. It was proposed that they should

have an active capital equal to 10 per cent of the capital of existing banks which might take stock in the new enterprises. This would result in a capital of something over $100,000,000 for the Reserve banks taken together, if practically all existing banks should enter the system. It was supposed, for a number of reasons, that the banks would so enter the system. More will be said on this point later in the discussion. How many state banks would apply for and be granted admission to the new system as stockholders in the Reserve banks could not be confidently predicted. It was, however, thought fair to assume at this point that the total capital of the Reserve banks would be in the neighborhood of $100,000,000. The bill recommended by the committee provided for the transfer of the present funds of the government, included in what is known as the general fund, to the new Federal Reserve banks, which were thereafter to act as fiscal agents of the government. The total amount of funds which would thus be transferred could not then be predicted with absolute accuracy, but the released balance in the general fund of the Treasury was not far from $135,000,000. Certain other funds then held in the department would in the course of time be transferred to the banks in this same way, and that would result in placing, according to the estimates of good authorities, an ultimate sum of from $200,000,000 to $250,000,000 in the hands of the Reserve banks. If the former amount be assumed to be correct, it was seen that the Reserve banks would start shortly after their organization with cash resources of at least $300,000,000. As will presently be seen in greater detail, it was proposed to give to the Reserve banks the reserves then held by individual banks as reserve holders under the National Banking Act for other banks. Confining attention to the national system, it was probable that the transfer of funds thus to

be made by the end of a year from the date at which the new system would be organized would be in the neighborhood of $350,000,000. If state banks entered the system and conformed to the same reserve requirements, they would proportionately increase this amount, but for the sake of conservatism the discussion was at first to be confined to the national banks. From figures which were developed from bank returns, it seemed likely that at least $250,000,000 of the reserves just referred to would be transferred to the Reserve banks in cash; and if this were done the total amount of funds which they would have in hand would be at least $550,000,000. This would create a reservoir of liquid funds far surpassing anything of similar kind ever available in this country theretofore. It would compare favorably with the resources possessed by government banking institutions abroad.

It will be observed that in what has just been said the Reserve banks have been spoken of as if they were a unit. The committee, however, recommended that they should be individually organized and individually controlled, each holding the fluid funds of the region in which it was organized and each ordinarily dependent upon no other part of the country for assistance. The only factor of centralization which had been provided in the committee's plan was found in the Federal Reserve Board, which was to be a strictly government organization created for the purpose of inspecting existing banking institutions and of regulating relationships between Federal Reserve banks and between them and the government itself. Careful study of the elements of the problem had convinced the committee that every element of advantage found to exist in co-operative or central banks abroad could be realized by the degree of co-operation which would be secured through the Reserve-bank plan recommended, while

many dangers and possibilities of undue control of the resources of one section by another would be avoided. Local control of banking, local application of resources to necessities, combined with federal supervision, and limited by federal authority to compel the joint application of bank resources to the relief of dangerous or stringent conditions in any locality, were the characteristic features of the plan as thus put forward. The limitation of business which was proposed in the sections governing rediscounts, and the maintenance of all operations upon a footing of relatively short time, would keep the assets of the proposed institutions in a strictly fluid and avai able condition, and would insure the presence of the means of accommodation when banks apply for loans to enable them to extend to their clients larger degrees of assistance in business. It was proposed that the government should retain a sufficient power over the Reserve banks to enable it to exercise a directing authority when necessary to do so, but that it should in no way attempt to carry on through its own mechanism the routine operations of banking, which required detailed knowledge of local and individual credit and which determined the actual use of the funds of the community in any given instance. In other words, the Reserve-bank plan retained to the government power over the exercise of the broader banking functions, while it left to individuals and privately owned institutions the actual directions of routine.

2. Congressional Action on the Bill.

As first presented, the bill was taken in hand by the House Committee on Banking and Currency, which, however, had not been named until a few days previous to the introduction of the measure. The committee held its first meeting June 6th, then began the active

work of considering the bill on July 7th, and continued regular sessions several hours each day until the beginning of September. The bill was then reported to a Democratic caucus and after a period of detailed discussion behind closed doors was ratified, and was thereupon formally reported, on September 9th, to the House of Representatives, where it was taken under debate on September 10th and ultimately forced to a passage in the House on September 18th. It was then sent to the Upper Chamber and was taken under advisement in the Senate Banking Committee, where extensive hearings were promptly begun, and were continued until October 25th. Thereafter, a month of consideration in committee ensued, and subsequently three days of caucus consideration in the Senate, a final report to the Senate as such being rendered on December 1st. Debate then began and was continued, first in the intervals of business already scheduled, then at practically continuous sessions until December 19th, when a final vote was secured and the measure within twenty-four hours sent to conference, from which it emerged on December 22d, receiving the President's signature on the following day.

When reported by the Senate Banking Committee, after its own consideration and that of the caucus, the banking bill contained no important changes in theory, as compared with the House draft, save only in the section which related to the method of retiring existing national-bank circulation and of providing for the refunding of United States 2-per-cent bonds. The bill, however, differed essentially from the House measure in many details, some of them of great importance, others of minor significance. The framework of the bill had been changed in no fundamental particular, but remained as it had been originally con-

structed. The detailed changes, taken in the aggregate, would, however, have altered in a considerable degree its scope and effect. A sketch of these changes must, therefore, be presented at this point.

As reported by the Senate committee, the bill, instead of providing for a series of Reserve banks not less than twelve in number, whose stock was to be owned exclusively by existing national and state banks, provided for not less than eight nor more than twelve of such banks, and permitted the stock, if not taken up by existing banks through subscription, to be sold to the public, or, if not subscribed for by the public, to be allotted to the United States government. It slightly altered the method of voting for directors of Reserve banks from the plan prescribed in the House bill. It relieved the national banks entering the system of the necessity of rechartering. The Federal Reserve Board was somewhat changed in composition through the elimination of the *ex-officio* member drawn from the administration, and was given broader and less restricted powers than had been conferred by the House bill, although none of a new or fundamental nature was added. The Senate committee, moreover, instead of making the deposit of public funds in Reserve banks mandatory, left it to the discretion of the Secretary of the Treasury to deposit such funds or not, as he might see fit, although the tenor of the provision on this subject was such as to indicate that the declared policy of the United States would in the future be that of making the deposits with the Reserve banks rather than with national banks, as in the past.

As a method of retiring United States bonds and national-bank circulation, the Senate bill provided that these securities might be annually assigned to Federal Reserve banks in a sum not to exceed $25,000,-

000, the banks to be required to purchase the bonds at par from their existing owners and to issue upon them, as security, notes exactly similar to existing national-bank notes and subject to the same requirements, limitations, and obligations.

In dealing with the reserve question, it was provided that Federal Reserve banks should maintain 35 to 40 per cent, instead of 33⅓ per cent, as in the House bill, and that national banks should maintain in central reserve cities 18 per cent, in reserve cities 15 per cent, and in the country 12 per cent, of demand deposits, with 5 per cent against time deposits, both the proportion to be kept in the Reserve banks and the rate of transfer being altered, as compared with the House bill, in such a way as to make the process of transfer easier for the contributing banks. By way of still further lightening the burden which, it was supposed, would be imposed upon the banks in this process of transfer, it was provided that one-half of the credits to be established with the Reserve banks created under the bill might be paper eligible for rediscount, while the notes issued by the Reserve banks were also allowed to be counted in the reserves of these member banks. The Senate bill, moreover, extended the provisions of the so-called Aldrich-Vreeland law of 1908, and inserted in the measure a provision authorizing the Secretary of the Treasury to sell bonds for gold, should such a measure be necessary at any time to maintain the redeemableness of Federal Reserve notes. Lastly, the Senate bill largely altered the provision which had been made in the House for the collection of checks and drafts at par throughout the country. While under debate in the Senate, the bill underwent some further alterations, none of which, however, materially changed its more important aspects, as already described. Such clauses as were inserted were intended mainly to

clarify the language or to add further safeguards which had been found or thought to be necessary here and there as the work proceeded.

Little needs to be said of the debate in the Senate. It is doubtful whether any important provision was altered on the floor as the result of discussion, although a few points at which the measure was weak were subsequently rectified, probably as a result of the repeated attacks to which they had been subjected during the weeks before the measure was finally adopted. As the bill ultimately passed the Senate it differed from the plan of the House in no respect that was of theoretical importance. It retained the provision for sales of stock to private holders and for the voting of the stock by trustees representing these holders, as well as for the purchase of stock by the United States itself, in case of necessity for so doing. It, moreover, introduced a change in the method of distributing the earnings of Federal Reserve banks whereby a portion of those earnings was to be employed for establishing a fund for guaranteeing the deposits of member banks which had taken stock in the Federal Reserve banks of their district. It altered the number of banks by cutting it to no less than eight and not more than twelve, in place of the "at least twelve" of the House bill. While many minor changes and alterations of wording were made throughout, they did not alter the essential structure of the plan, but in some cases carried it farther than the framers of the House measure had been able to do, embodying ideas that had been urged by them while the measure was under discussion, but for which they had not succeeded in obtaining indorsement. Perhaps the most injurious features which were added during the Senate stage of the measure were the provision cutting reserves of member banks, and that permitting the introduction

of bank notes into reserves as a constituent element therein.

3. Contents of the Final Bill.

The substance of the work done in conference committee may be summarized somewhat further in order to bring out the points that had been accepted as innovations upon the House bill and those that had been rejected because the changes proposed in them were not deemed wise. Turning first to the alterations in the House bill that secured acceptance, the principal features may be enumerated as follows:

1. Introduction of provision for sale of stock in Federal Reserve banks to the public in the event that not enough banks subscribe for the stock to furnish an adequate capital in any given district.
2. Provision for alternative voting in the choice of directors of Federal Reserve banks so as to insure prompt election.
3. Reduction of number of Federal Reserve banks to not more than twelve, as against the "at least twelve" of the House bill.
4. Elimination of requirement that all national banks recharter.
5. Broadening of powers of Federal Reserve Board and modification of language relating to rediscounts between Federal Reserve banks, so as to render such rediscounts easier than was intended by the House bill.
6. Provision that the Secretary of the Treasury might, not must, deposit public funds in Reserve banks.
7. Reduction of reserve requirements placed upon member banks under House bill.

On the other hand, the following important points were yielded by the Senate in the conference:

1. Omission of provision that holders of stock sold to private individuals (if any) should have voting power in directorates of Federal Reserve banks and elsewhere.

2. Elimination of guaranty of bank deposits by use of surplus earnings.

3. Elimination of provision that Federal Reserve Bank notes might be counted in reserves of stockholding banks.

4. Restoration of provision that many classes of checks should be collected at par throughout the country, and that where such par collection was not enforced the charge for making collection should be fixed by the Federal Reserve Board.

5. Elimination of domestic acceptances, thereby excluding them for use by stockholding banks and from rediscount by Federal Reserve banks.

6. Modification of reserve requirements as formulated by the Senate so as to require actual cash reserves in the vaults of country banks (the Senate having entirely dispensed with such reserves after twenty-four months after date of the passage of the Act) and general stiffening of reserve requirements made by the Senate, although the final language still constituted a reduction below the House provision.

7. Reduction of period of maturity for which discountable paper might run.

While many other points of modification and concession on either side might, of course, be enumerated, it is believed that the foregoing presentation is representative, and shows sufficiently well the nature of the conference work and the character of the points conceded on either side. Assuming that such a fair or representative selection has been made, it is evident that the work of the conference resulted in the estab-

lishment of the House contentions at nearly every essential point, the exceptions to such a remark being found in two main particulars: (1) the reduction in the number of Reserve banks and their limitation to not more than twelve at any time, and (2) the provision that public deposits might or might not be made in the Reserve banks, at the discretion of the Secretary of the Treasury. While other points were significant and important in their way, it can certainly be fairly concluded that on those matters involving important issues of theory the House virtually held its own in most respects. In fact, it is an accurate generalization that the final bill as completed in conference committee, and as passed by both Houses, was a closer approach to the original House draft of the measure than anything that had intervened during the time the bill was going through the various permutations to which it was subjected in its slow progress from one stage to another of the legislative process.

At one other point there was marked and vital departure from the original House measure—the provision with reference to the refunding of United States 2-per-cent bonds and the treatment of the currency based upon such bonds. On this subject the final action of the conference was nearly equivalent to the acceptance of a plan formulated by the administration and designed to take the place of all of the various other schemes that had been recommended from different sources in either House.

To the scientific student of banking it need hardly be said that the striking aspects of the legislation were these three: (1) the creation of a general discount market for commercial paper; (2) the systematic pooling of reserves of existing banks; and (3) the provision of an elastic currency. In the multitude of details provided by the legislation, and in the various

adjustments rendered necessary by it with respect to government deposits, bank reserves, examinations, and other more or less important matters, it is noticeable throughout that everything done had been for the purpose of promoting the objects already enumerated, and of insuring the transformation of American banking from its older basis of organization to its new proposed type of effort.

CHAPTER XXVI

OPERATION OF THE FEDERAL RESERVE SYSTEM[1]

I. The Federal Reserve Board.

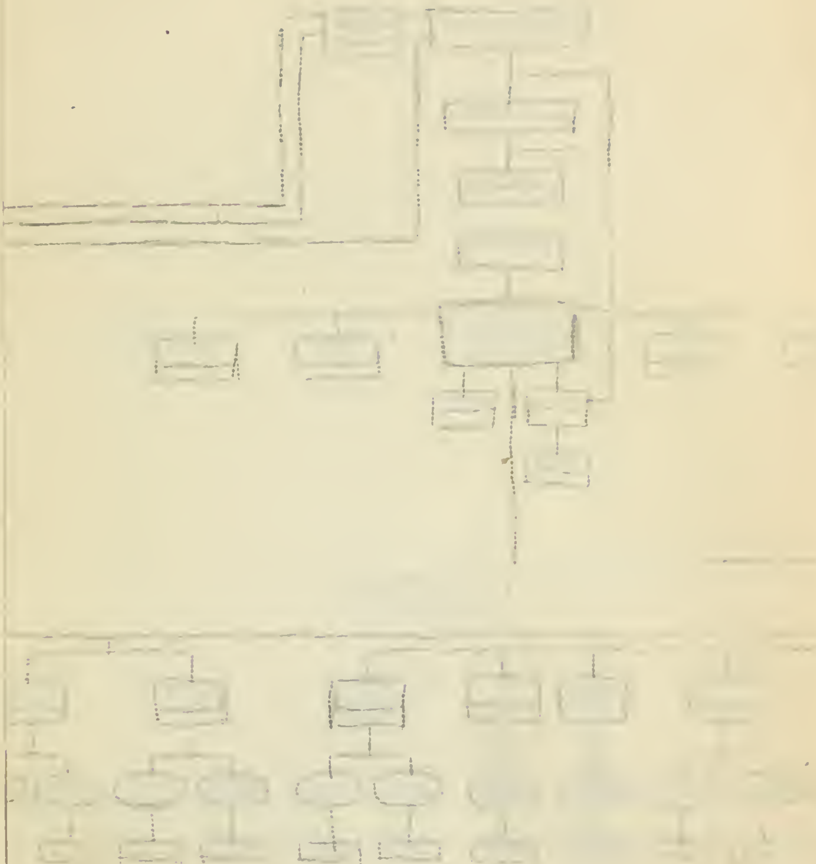
Governmental supervision of banking is everywhere to-day accepted as a public necessity. Under the old National Bank Act it was furnished by the Comptroller of the Currency. Under the Federal Reserve Act a new mechanism for it is supplied by the Federal Reserve Board.

The Federal Reserve Board is the central controlling and directing mechanism of the Federal Reserve system and, therefore, of the banking system of the United States. Under the terms of the Act it is appointed by the President, by and with the advice and consent of the Senate, subject to the following limitations:

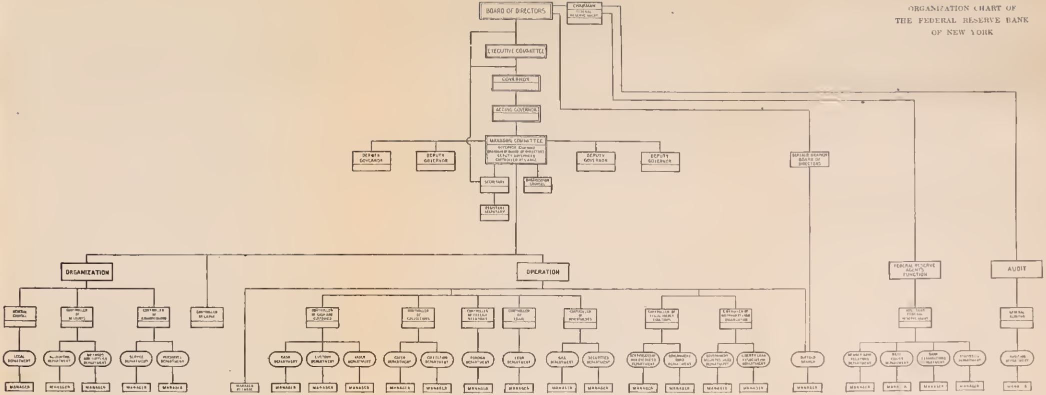
1. No two members of the board can be chosen from the same district.
2. Each member must have been a bona-fide resident of the district from which he is appointed for two years preceding his appointment.
3. Two members of the board must be men of practical experience in banking and finance.

Subject to these limitations, the President, with the confirmation of the Senate, appoints five persons of his own selection. These, together with the Comptroller of the Currency and the Secretary of the Treasury,

[1]The first twelve pages of this chapter are reprinted by permission of the publishers (The La Salle Extension University) from *American Banking*, by H. P. Willis.



ORGANIZATION CHART OF
THE FEDERAL RESERVE BANK
OF NEW YORK



make up the Federal Reserve Board. The Secretary of the Treasury is *ex-officio* chairman of the board, but the board has always a chief executive officer, known as the governor, and a second executive, similarly named, and known as the vice-governor. The board has power to adopt its own by-laws, rules of operation, and the like, and to select its own place of meeting.

Its functions are lengthy and detailed, but they may be briefly summarized under the following main heads:

1. To select government directors in Federal Reserve banks and to approve or disapprove the salaries of officers of the banks.
2. To establish rules and regulations for the management of business in the several districts.
3. To review the rate of discount at Federal Reserve banks and to originate the rate of rediscount between Federal Reserve banks.
4. To regulate the reserve holdings of the several banks and to impose penalties or fines upon those banks that permit their reserves to fall below the specified limit.

The permanent and regular duties of the Federal Reserve Board outlined above may be considered under three general divisions:

(1) Administrative.
(2) Constructive.
(3) Educative.

1. Administrative Duties.

Administrative functions are essentially of two kinds: (a) The regular and recurring duties necessary to the operation of the system, and (b) the sporadic or occasional duties which grow out of the operation of the Act, but which do not occur at any definite time or times.

Of the regular and stated duties of administration, probably the most conspicuous is that of regularly approving discount rates when they are submitted by the several banks. To do this work intelligently involves careful study and consideration of the general business conditions throughout the nation, of the situation in each of the reserve districts themselves, and of the broad general outlook for the future. An incidental consideration is necessarily that of the earnings of Federal Reserve banks, and the degree in which it is necessary or desirable to enlarge those earnings through the taking on of more business.

Another administrative function practically continuous in its operation is that of granting to banks power to enlarge their acceptances of paper up to 100 per cent of their capital and surplus, and of extending to them the right to exercise the functions of trustee, executor, administrator, and the like. Under the terms of the Federal Reserve Act these powers cannot be conveyed except by special permit, and any member bank which desires to make use of them must, therefore, obtain the consent of the board. Under the system which has been laid down by the board this involves an application first of all to a local Federal Reserve bank, and when such an application has been approved the board is in position to take action, either confirming or disapproving the findings of the Federal Reserve bank which had passed upon it.

The law requires also that each Federal Reserve bank shall submit to the Federal Reserve Board statements of compensation paid to officers and directors, that they may be approved by the board. This naturally implies a study of proper rates of compensation, and the taking of action designed to fix such rates when occasion demands. Once established, the salary lists of the Federal Reserve banks are not likely to show extensive changes,

but such alterations as there are will recur and require attention from time to time.

Other administrative duties must likewise be performed, among them the passing upon and approval of applications for and surrender of capital stock in Federal Reserve banks, the holdings of the member banks varying according as their own capital and surpluses increase and decrease. These, however, are for the most part technical, and no further enumeration is necessary.

2. Constructive Duties.

The constructive duties of the board prescribed by law are seen to best advantage in the provision which calls for the development and application of regulations designed to control methods of business. Since the board was organized it has issued regulations defining commercial paper eligible for discount, regulations relating to the definition of savings accounts, rules for the issue and retirement of capital stock, rules for the purchase of warrants and bankers' acceptances in the open market, and a variety of others.

These regulations govern the practices of the Federal Reserve banks, and have substantially the force of law, inasmuch as the Federal Reserve Act itself calls for the exercise of these functions subject to the rules made by the board. Inasmuch as the character of the rules and regulations thus made may gradually alter the scope and methods of business done by the banks, it is clear that the work of the board in this regard is in the highest degree constructive in its nature. At times it is almost equal to the extensive limitation or modification of the provisions of the law itself.

It is difficult to say how far, when the system is fully perfected, it will be necessary for the board to alter such regulations. It may be expected that ultimately

the regulations of the board will be changed but little, and that any modifications will be the outcome of observation and experience of banking and business conditions throughout the nation. By changes in the discount rate the volume of business will be controlled; but the methods of business at the banks which are dependent upon the regulations aforesaid will not be greatly altered. At present the Federal Reserve system is still in process of development, and its business practices are being worked out. This has necessitated more or less frequent changes in regulations, but such changes, as already indicated, will diminish in number as time goes on.

The Act has also placed in the hands of the Federal Reserve Board the power of changing and readjusting the reserve districts, subject to the broad general requirements that there should not be less than eight or more than twelve. How extensive such readjustments of the districts will be, experience must show; and when the time comes to make them, an important constructive function of the board will be that of determining when and how they shall be introduced. Already the board has granted a few petitions for readjustment of boundary lines between districts.

Of the same general character is the provision of the Act which calls for the establishment of branches, and which practically invests the board with the authority to oversee the establishment of such branches of Federal Reserve banks. The operation of the law in this particular intrusts to the board one of its most important duties of a constructive nature.

3. Educative Functions.

Among the implied or educative duties of the board is undoubtedly that of bringing about general and harmonious action among the several districts and of weld-

ing the different parts into a consistent, united whole. In order to do its work well the board must necessarily be in close touch with the several districts and know what is going on in them, and, with this purpose in view, direct communication with the different districts has been intrusted to the several members of the board in order that they may keep themselves and their colleagues advised of any developments in these districts which call for special attention.

An annual report to Congress was required by law and must be formulated by the board. It was also intrusted with the duty of keeping the country advised of the condition of the system. It has undertaken to carry out this duty in part by the establishment of a publication known as the *Federal Reserve Bulletin,* in which are collected notices and statements about the work undertaken and the results accomplished in the operation of the system. Much more might be said of the detailed work of the board in the task of educating the public to a knowledge of its operations and of standardizing bankng practices, but the statements already made practically cover the ground in its most essential aspects.

II. Organization of the Board.

The Federal Reserve Act imposes practically no limitations upon the methods by which the board performs its own work. In accordance with the provision of the law which authorizes the Secretary of the Treasury to provide quarters for the board in his department, the main offices at Washington have been located in the Treasury Building. While there is no rigid practice, it has been customary to hold meetings from three to five times a week, usually each day, although two meetings a day have not been uncommon.

A set of by-laws defining the organization of the board was early adopted, and these provide for an executive committee whose function it is to transact all necessary business not involving any new plans or policy. Other committees may meet occasionally as convenience dictates. Sessions of the board are held in private, and thus far no public sessions, with the exception of the hearings on appeals from decisions of the Reserve Bank Organization Committee, have been appointed.

When a decision has been arrived at with reference to a proposed change in the discount rate, or the adoption of any new policy or method of business, the Federal Reserve agents are at once advised by telegraph or letter, and then the decision is communicated to the various Federal Reserve banks. The Federal Reserve agent is regarded by the board as its representative on the ground, and, as such, the official medium of communication between it and the bank to which he is accredited; although the board may, and frequently does, hold direct communication with the governor of the Federal Reserve bank as being the active operating officer.

The Comptroller of the Currency is a member of the Federal Reserve Board. The Federal Reserve Act did not change his previous function as chief of the national banking system, or his responsibility to the Secretary of the Treasury and to Congress. These relationships, therefore, continue, and his presence on the board simply serves to establish a connecting link between the supervision of the national banking system as such, and the general supervision of the Federal Reserve system, including Federal Reserve banks and such non-national banks as may have become members.

In the same way the Secretary of the Treasury's membership in the board in no way alters his other re-

lationships or duties. The fact that he presides over the board enables him to communicate to it necessary information with reference to the policies of the Treasury Department on financial and banking questions, and to receive from it advice and information concerning the work of the Reserve system.

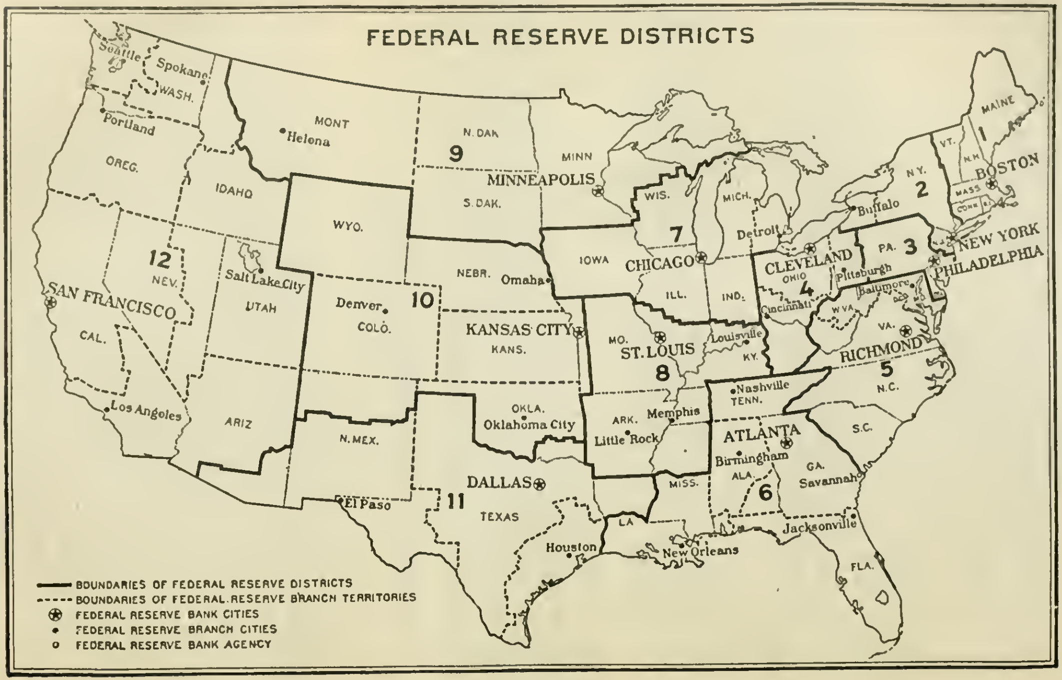
Under the Federal Reserve Act the placing of public deposits in the Reserve banks is left entirely in the hands of the Secretary of the Treasury. The membership of the Secretary of the Treasury in the Federal Reserve Board should, under these conditions, be much more than merely formal, and includes much more than the mere rendering of advice and suggestions. It is of necessity a practical working participation on the part of the Secretary of the Treasury in the affairs of the board, and, conversely, a participation on the part of the board as a conservator of the banking resources of the country in the management of one set of the activities of the Treasury Department.

In organizing its staff at Washington for the performance of the duties already enumerated and others incidental to them, the Federal Reserve Board found it desirable to recognize several distinct divisions. The task of examining member banks (not national) and of making periodic examinations of Federal Reserve banks has been committed to a distinct bureau or division known as the Bureau of Audit and Examination, headed by a chief under whom is organized a small corps of examiners and assistant examiners. The task of examining the twelve Federal Reserve banks would not in itself be a heavy one, but, as state banks enter the system, the duty of ascertaining whether they are in suitable condition for admission, and of making sure that they continue to be so, involves a considerable amount of labor.

Another of the main divisions into which the board's

work is divided was that of reports and statistics. When the Federal Reserve Act was drawn, provision was made for a weekly report of the condition of all Federal Reserve banks and of each bank, showing the main items in their accounts. This is prepared in the Division of Reports and Statistics from data which are weekly telegraphed to the board, and are combined to make up the final statements. Provision was also made when the Federal Reserve banks were organized for regular reports by the several banks of paper purchased, with name of purchaser, maturity, rate, etc. Complete lists showing all these items of information, and giving data as to the daily condition of the several banks, are daily forwarded to Washington by each one of the institutions. It was the duty of the Division of Reports and Statistics to combine and analyze them and to prepare the result of the study in such form for examination by members of the board as will aid them in forming conclusions regarding the business of member banks, as indicating necessary changes in rates of discount, and as otherwise determining the policy to be pursued in the general conduct of the banking system. A later modification of this part of the board's work was made by the appointment of a statistician in general charge of the statistical work of the organization, while the routine work of compiling reports was left to the Division of Accounts under an independent head. In 1918 a Division of Analysis and Research was organized. To it was given the general scientific work of the board and the supervision of the monthly *Bulletin* and other scientific publications.

In the Federal Reserve Act it was specified that each Federal Reserve bank might act as a clearing house for its members, but that the Federal Reserve Board might act as a clearing house for the Federal Reserve banks, or might designate one of the Federal Reserve


FEDERAL RESERVE DISTRICTS
BOUNDARIES OF FEDERAL RESERVE DISTRICTS
BOUNDARIES OF FEDERAL RESERVE BRANCH TERRITORIES
FEDERAL RESERVE BANK CITIES
FEDERAL RESERVE BRANCH CITIES
FEDERAL RESERVE BANK AGENCY
SAN FRANCISCO
12
MINNEAPOLIS
9
KANSAS CITY
10
DALLAS
11
CHICAGO
7
ST. LOUIS
8
ATLANTA
6
CLEVELAND
4
RICHMOND
5
PHILADELPHIA
3
NEW YORK
2
BOSTON
1
Seattle
Spokane
Portland
Los Angeles
Salt Lake City
Helena
Denver
Omaha
Oklahoma City
El Paso
Houston
Little Rock
Memphis
Louisville
Nashville
Birmingham
New Orleans
Savannah
Jacksonville
Detroit
Cincinnati
Pittsburgh
Baltimore
Buffalo
WASH.
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IDAHO
MONT
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banks thus to act. In pursuance of this authority, the board has established a Division of Clearing in Washington for the purpose of settling balances between Federal Reserve banks without the actual shipment of coin. This division is in charge of a fund of about $426,000,000 in gold, and conducts a set of books on which are recorded from day to day credits and debits between Federal Reserve banks arising out of their operations during the day. As given banks are credited or debited on these books, the amount of their ownership in the gold fund changes.

III. Supervision of Reserve Banks.

Federal Reserve banks which are under special obligations and duties are not only closely supervised by, but in fact operated under, close government supervision. Two features deserve to be specially noted in this connection:

1. Owing to its close relation with the government, each Federal Reserve bank has a special officer representing the government, who is chairman of its board of directors and who is designated as "Federal Reserve agent."
2. Every Federal Reserve bank confines its discount business to other banks, a fact which at once alters the type of organization of the institution in some important particulars.

IV. Board of Directors.

The fundamental control of the Federal Reserve bank is in the hands of the board of directors, consisting of nine members. This board of directors consists of three classes, each containing three members and each

class being designated by a letter, as A, B, and C. Class C directors are nominated by the Federal Reserve Board and represent the government. Class B directors are business men not engaged in banking who are presumed to represent in a general way the industrial, commercial, and agricultural interests of the district in which the bank is situated. Class A directors are directly representative of the banks.

Both Class A and Class B directors are chosen by the banks, and for the purpose of this selection the banks in each district are divided into three groups. Group one chooses one Class A and one Class B director, group two the same number, and group three the same. In group one, the voters or electors are the banks of large capitalization; in group two those of medium capitalization; and in group three the small banks. The banks are divided into three groups in such a way as to place banks of similar capitalization in each. Each bank has one vote, irrespective of its size. The group division, however, prevents the small banks from electing men who represent them exclusively and insures approximately equal representation to banks of somewhat smaller size. The directors in question are appointed for equal terms of three years each, but these terms are so arranged that two directors go out of office each year, thus insuring opportunity for rotation.

The chairman of the board of directors is designated by the government and is the Federal Reserve Agent of the bank. The Federal Reserve Agent is aided by another officer known as the Assistant Agent, confirmed by the Board. The Federal Reserve Agent is one of the Class C directors. The remaining Class C directors, sometimes described as the "unattached" directors, have no specific functions other than those assigned to any director of the bank.

V. Federal Reserve Agent.

Reference has already been made to the Federal Reserve agent. As chairman of the board of directors, his function is to preside over meetings of the board and in general to perform all those functions of organization which ordinarily fall to the chairman of a deliberative body. As representative of the government in his capacity of Federal Reserve agent, he communicates with the Federal Reserve Board and transmits communications from that body to the bank. He also acts in a fiduciary capacity, receiving from the board at Washington the notes ready for circulation in such amounts as the bank deems to be necessary, and issuing or transferring these to the bank whenever the institution has placed with him, for the special protection of such notes, commercial paper of the kinds specified in the Federal Reserve Act as eligible for rediscount. It is his duty to report regularly to the Federal Reserve Board upon prevailing banking and commercial conditions in his district and to inform the board of any special or unusual conditions demanding attention from the governing body.

An important function which falls to the Federal Reserve agent is that of advising the board, whenever necessary, that the bank desires to change the rate of discount on commercial paper. If such application for change is approved, the Reserve agent notifies his bank and announces the rates thus newly fixed to the public. Beyond these definite and well-recognized functions, the duties of Federal Reserve agent vary somewhat from bank to bank, according to the personality of the agent himself.

VI. The Federal Advisory Council.

The Federal Reserve Act creates an advisory council consisting of as many members as there are Federal

Reserve districts. It directs the board of directors of each Federal Reserve bank to select annually from its own district one member of this council. The council shall meet at least four times a year at Washington, D. C., and oftener if called by the Federal Reserve Board. The council at its own discretion may hold additional meetings at Washington or elsewhere.

The council is, as its name implies, simply an advisory body which confers directly with the Federal Reserve Board on general business conditions and may call for information or make recommendations concerning Federal Reserve banking operations to the Federal Reserve Board.

VII. Outside Membership in the Federal Reserve System.[1]

When the Federal Reserve Act was first projected it was not intended to include in the system banks or companies organized under non-national charters. Many state bankers and trust-company managers, however, promptly perceived the advantages to accrue from the new system, and there was an immediate and strong demand for membership provisions applicable to their companies. The Act as adopted, therefore, made provision for admitting to membership state banks and trust companies upon terms and conditions to be prescribed by the Federal Reserve Board. Not a few applications for membership were at once filed, but influential trust-company leaders feared that the provisions for getting out of the system were not sufficiently clear—that, while it might be easy enough to enter, it might

[1] The following pages in this chapter are in large measure taken by permission of Messrs. Macmillan Co., publishers of *The Modern Trust Company* (Kirkbride, Sterrett, & Willis), from a chapter in that volume written by H. P. Willis.

be difficult to withdraw. To relieve this fear the Federal Reserve Board promptly adopted liberal regulations governing application for membership and withdrawal of state institutions. Yet both state banks and trust companies entered the system very slowly. Accordingly, Congress determined to amend the Act, and on June 21, 1917, an Act was passed whereby the regulations adopted by the board were incorporated into the statute and were thus given the force of law. The United States had become a belligerent on the side of the Allies in the war against Germany at about the same time that the amendment to the Reserve Act was taken under advisement. The impulse was therefore strong to enter the system out of considerations of patriotism and desire to present a united financial front to the enemy during the struggle. Coupled with patriotic considerations, the now highly favorable terms of membership and the natural wish to secure the protection of the Federal Reserve Bank organization brought many state banks and trust companies into the system. The total number of such state institutions on December 31, 1921, was 1,624, among which were some of the strongest and largest banks and trust companies in the country.

The Federal Reserve Board under the provisions of the law has developed a detailed method of procedure in passing upon applications for admission to the system.

The only indispensable requirements laid down in the law as conditions of the membership of a state institution in the Federal Reserve system are that it shall be in sound condition and shall possess a paid-up unimpaired capital adequate to entitle it to become a national bank in the place where it does business. Specifically this latter requirement is as follows:

Places with population up to 3,000......	$ 25,000
Places with population over 3,000, but not over 6,000...........................	50,000
Places with population over 6,000, but not over 50,000...........................	100,000
Places with population over 50,000......	200,000

The requirement that the institution be in sound condition has been applied by the Federal Reserve Board in a clause of the regulations governing admissions which states that the board will consider in connection with each prospective member, its financial condition, the general character of its management, and whether or not the corporate powers exercised by it are consistent with the purposes of the Federal Reserve Act. It is not true, as supposed by many, that membership in the system implies the surrender of charter powers or the acceptance of new and rigid limitations upon business. Under the terms of the Act, state members are members in the full sense of the word, and hence are naturally subject to the regulations and restrictions which affect all members, as well as to the special regulations which may be laid down by the board. As a matter of fact, however, the board in admitting state members has seldom or never required any material changes in the scope of their business, although in various cases where very broad powers were being exercised it has required the applicant to undertake that it would not in the future seek to exercise any new or additional functions without first obtaining the permission of the Federal Reserve Board. It may be broadly stated that the only conditions directly operating to keep a bank from joining the system would be too limited a capital, poor financial condition, or incompetent or doubtful management. This, of course, does not mean that companies which fail to join may not have other and sound reasons for their decision. It does mean that, except where

the company's capital is below $25,000, there is no necessity for remaining outside the system if the managers of an institution wish to enter it. The question of admitting the very small institutions has been considered, but thus far opinion has not been favorable.

The state institution which has determined to enter the Federal Reserve system first signifies its intention through a resolution of its board of directors in somewhat the following form:

Whereas, it is the sense of this meeting that application should be made on behalf of this corporation for stock in the Federal Reserve bank of .... in accordance with the provisions of the Federal Reserve Act and the regulations of the Federal Reserve Board made in pursuance thereof;

And whereas, six per cent of the paid-up capital and surplus of this corporation amounts to $................;

Now, therefore, be it resolved, That the president or vice-president and the cashier or secretary of this corporation be and they are hereby authorized, empowered, and directed to make application for and to subscribe to .... shares, of a par value of $100 each, of the capital stock of the Federal Reserve bank of ...., to pay for such stock in accordance with the provisions of the Federal Reserve Act, and to agree for and in behalf of this corporation to comply, upon receipt of the approval of this application by the Federal Reserve Board and its acceptance by this corporation, with all the requirements of the Federal Reserve Act and the regulations of the Federal Reserve Board made in pursuance thereof which are applicable to state banks and trust companies which become members of a Federal Reserve bank.

Correspondence with the Federal Reserve agent (chairman of the board of directors of the Federal Reserve bank) of the district may precede or follow the adoption of this resolution and results in furnishing the applicant company with a form designed to describe the applicant. The Federal Reserve agent may call for information on additional points if circumstances seem to require, but ordinarily the bank will merely

fill out the application form and prepare a certified copy of its statement of condition on a recent date, and a copy of its charter and articles of incorporation with all amendments up to date, and transmit the papers to the Federal Reserve agent. The latter officer has meantime probably made inquiry as to the general standing of the institution and has usually requested the state banking superintendent or commissioner for copies of the last report of examination of the concern. Having satisfied himself by a study of the papers that the applicant will probably be a desirable member, he may next institute an examination of the bank. A report of such examination together with the papers already described is then forwarded to the Federal Reserve Board for action. The board refers the documents to its Division of Examination for study, and upon receiving the division's report, either accepts or rejects the application.

A state institution occasionally hesitates to apply for membership, fearing that through technical defects in the application or unavoidable conditions attendant upon its business it may be rejected. It is rightly felt that such rejection, if known or surmised by competitors of the company, might hurt its standing or leave a bad record with dangerous possibilities for the future. There is, however, little or no basis for such fears. Long before the time comes for formal action by the board the applicant will have been advised of reasons (if such exist) for considering its admission impossible. In many cases such obstacles are easily overcome, and the Federal Reserve agent points out the means of eliminating them. If they are practically ineradicable the applicant will have ascertained that such is the case before it has gone far. Even before its board has authorized application the state bank has usually been able to get a preliminary informal opinion

which is in nearly all cases borne out by a subsequent action. Should a bank's application pass the scrutiny of the Federal Reserve agent and receive his favorable recommendation, but be looked upon with doubt or disfavor by the Reserve Board, it is customary to send the applicant an informal letter suggesting that the application be withdrawn pending the introduction of changes along lines indicated. If the bank then feels that compliance is too onerous or expensive it can request suspension of action or withdraw its application entirely.

Favorable action by the Reserve Board on an application for membership is frequently accompanied by a statement of conditions or changes in policy to which the applicant will be asked to assent. Some of the conditions often made in this way are as follows:

1. Elimination or limitation of certain lines of paper —*e.g.*, too large real-estate loans.
2. Agreement not to take on or initiate new kinds of business without consent.
3. Restriction of acceptance lines to 100 per cent of capital and surplus.
4. Limitation of maximum loan to any one person or corporation.
5. Miscellaneous modifications of internal organization or management.

These requirements have never been considered onerous or oppressive, but if they prove unacceptable to the applicant it may decline to comply and may thus automatically suspend further action on its application. Assuming, however, as in the vast majority of cases, that the conditions are satisfactory, the company signifies its acceptance of the terms by letter or telegram, and the Reserve agent of the district is so advised. Thereupon the company is in position to

proceed with the details necessary to complete its active membership in the Reserve bank of its district.

Such entrance upon active membership involves assumption of the same duties that devolve upon all members and are as follows:

Subscription to stock. The new member subscribes to the stock of the Federal Reserve bank of its district in an amount equal to 6 per cent of its own capital stock and surplus. Should the member bank subsequently increase or decrease its stock or surplus it makes a corresponding change in its holding of the stock of the Federal Reserve bank.

Payment of subscription. One-half, or 3 per cent, of this subscription to the stock of the Reserve bank is payable at once in cash or acceptable exchange, the other half remaining subject to call.

Simultaneously with the payment of the subscription to capital stock, the new member must establish (and thereafter maintain) with the Reserve bank a "reserve balance" payable in cash or acceptable exchange as follows:

1. If situated in a central reserve city, 13 per cent of its aggregate demand deposits and 3 per cent of its time deposits.
2. If situated in a Reserve city, 10 per cent of its aggregate demand deposits and 3 per cent of its time deposits.
3. If situated elsewhere, 7 per cent of its aggregate demand deposits and 3 per cent of its time deposits.[1]

[1] A "time deposit" under the Reserve Act includes deposits payable after thirty days, savings accounts, certificates of deposit subject to notice of thirty days or over, and postal savings deposits.

The company is now a full member in regular standing.

VIII. Privileges of Membership.

The member of the Federal Reserve system enjoys certain privileges which have been the primary cause for entering it and which may now be stated in detail:

Power to rediscount. The member may at any time submit "eligible paper" for rediscount. Proceeds of such discounts are carried to its credit on the books of the Reserve bank.

Authority to use transfer system. The "reserve account" of the member is not a "dead" or inactive account, but can and should be regularly used and drawn upon. The "required reserve" is merely the equivalent of the "minimum balance" required by many banks of their customers. Regular deposits in the Reserve bank should be made by the member, and when collected the proceeds are carried to its credit and offset checks drawn on its account. The reserve account thus serves as a medium for collections and transfers.

Privilege of calling for service. The Federal Reserve Board has prescribed a long list of functions which may be performed by Reserve banks on behalf of their members and for the exercise of which the members are therefore entitled to call. Among these are the services of purchasing securities, "checking" commercial paper, and otherwise performing the duties of a "correspondent." Not all Reserve banks have undertaken these functions on an extensive scale, but their work in these directions may be expected to grow.

Receipt of dividends. Every member bank is entitled to cumulative dividends upon its Reserve bank stock at 6 per cent per annum.

IX. Duties and Obligations of Membership.

The chief duties and obligations of membership have already been made plain in connection with the terms and conditions of admission. The member must hold its investment in the stock of the Reserve bank and must maintain its reserve either by depositing or rediscounting. There are, however, certain other obligations which grow partly out of the provisions of law and partly out of regulation and custom, as follows:

Examinations. Under the Federal Reserve Act the Reserve bank or the Reserve Board may at any time order a special examination of a member. This, however, is unusual and the practice is to accept the returns of state banking departments acting either independently or in co-operation with Reserve-system examiners.

Reports. Three classes of reports must be made by member banks, as follows:

1. Semiannual report to the Reserve bank of the district as to earnings and dividends.
2. Three reports each year on call of the Federal Reserve Board, the dates being usually identical with those named by state banking departments.
3. Report each week on reserve condition.

Penalty for deficiency of reserves. Under the Federal Reserve Act a Federal Reserve bank may impose upon members whose reserve accounts are below the required minimum a penalty for such deficiency, which they must meet. This penalty is prescribed by the board and is at a rate equal to the ninety-day discount rate plus 2 per cent.

Free collection service. The member must undertake

to collect without charge to the Reserve bank all local items sent it by the Reserve bank.

X. Loss of Membership.

A nonnational member of a Federal Reserve bank may return to its original status as a nonmember or outside institution in any one of several ways It may consolidate with another under a new charter, or it may be called upon by the Reserve Board to forfeit its membership because of failure to comply with law or regulations, or it may simply withdraw. In the last-named event it gives notice to the board six months in advance, and in the ordinary course its stock is canceled and it receives back an amount equal to its paid-up subscription, plus one-half of one per cent per month from the date of the latest Reserve bank dividend (not exceeding book value) plus the net worth of its reserve account. Some small companies have already gone into and out of the Reserve system one or more times, as they felt that their interests seemed to dictate. The operation involves little or no difficulty or apparent loss of credit. It has thus far never been necessary to expel a member, but some institutions which have withdrawn probably could not regain admission without further changes in their methods or their holding of paper. As in most organizations, it is easier to remain a member than to withdraw and later regain membership.

CHAPTER XXVII

GOVERNMENT AND BANKING

I. Relationships Between Governments and Banks.

In almost all modern countries the business of banking has assumed a special relationship to the government; for there has been a tendency to exercise an increasing degree of surveillance over essential businesses of all types, especially over those which occupied a predominant influence. Banking would not in any case have been exempt from this kind of supervision, but the supervision of banking is probably older than that which is exercised over most other kinds of business. Historically it may be traced to the fact that in early modern times the state had definitely assumed the function of issuing money; while, when banking first began its modern development, the assumption that bank notes were money and that they were therefore to be controlled or regulated as a matter of state function or duty was likewise generally accepted. Within more recent times, however, specific business relationships between the government and banking institutions have come to be definitely accepted. Such relationships may be regarded as assuming the following principal forms:

1. In some countries the government is either whole or part owner of a central banking institution, or where it owns no stock it appoints the officers or directors of such a banking establishment. To such

institutions is committed a sort of general oversight over the financial community at large. This may be informal in its scope, but nevertheless very thorough.

2. Elsewhere governments provide for the regular examination and inspection of banks, giving publicity to their reports, and through their officers requiring that banks conform to certain well-marked legal requirements.

3. In practically all countries governments have large revenues which they must receive and disburse through banking channels, and they thus become customers of banks on a large scale. In this capacity, their receipts and disbursements through the banks have a direct influence upon the position of the whole banking community and affect its soundness.

4. In some countries, too, the government has undertaken, either through direct lending or through guaranteeing the operations of private institutions, to furnish funds under specific conditions to individuals or corporations engaged in particular kinds of business which are supposed to be in need of such support or aid.

It is necessary to examine briefly these various types of relationship between governments and banks and to see how they affect the general organization of the banking system.

II. Government Ownership of Banks.

Cases in which there is complete or partial government ownership of banking institutions should probably be considered as distinct from those in which the government merely controls or directs banking through the appointment of officers or directors of such institutions, yet the general principle is the same in both cases. The latter kind of participation is considerably the more common, but the former is still a widespread type

of government activity. Examples in American history may be found in the First and Second banks of the United States (see pp. 390–396), while in contemporary life perhaps the best illustration is afforded by the Commonwealth Bank of Australia—completely owned and operated by the government. In the First and Second banks of the United States the federal government was a minority stockholder, controlling twenty per cent of the shares; in the Commonwealth Bank of Australia the government is sole owner and the institution represents the government in its financial capacity and does a regular banking business in all branches. A somewhat similar instance is that of the Philippine National Bank organized in 1916, with the government of the Philippines owning always a large majority of its stock. Among European banks somewhat similar examples, although of a less marked type, may be found. In all these cases the government undertakes the business of banking largely for the purpose of controlling and regulating rates of interest, insuring what it conceives to be a fairer distribution of loans, administering its own funds, and supervising the operations of the rank and file of the privately owned banks. As yet the judgment of economists with reference to public participation in banking is not absolutely unanimous. On the whole, however, the experience of governments which have thus participated in direct banking operations has not been very happy. This does not mean that business has always been carried on at a loss. Both in the past and at present, governments which have owned a part or the whole of large banking institutions have frequently profited handsomely. The difficulties in the way of this kind of government control have grown out of the fact that the banks were usually beset by those who desired accommodation on a political basis, but were unable to

get it, or they were charged with having discriminated in favor of or against some element in the community, or in some other way there was furnished a ground for attack. In sundry cases governments which have yielded to political pressure have actually engaged in unsound loans, and the banks in which they were interested have speedily suffered the consequences of bad banking. They could not be saved from loss merely because of the fact that the public was a large stockholder in them.

On the whole, the opinion has become quite well developed that if the government is to participate in banking it will do so to best advantage as either a minority stockholder or simply as a minority director, acting through individuals who are chosen to represent it in the latter capacity. The most striking example of a banking system in which the government, without being a stockholder, nevertheless participates on a minority basis in operation, is the Federal Reserve system. Through the Federal Reserve Board the government of the United States appoints one-third of the directors of each of the Federal Reserve banks, and it thus has an indirect share in the management of these institutions. In some of the European banks the government may designate the chief officer or officers and at times a part of the directors. The situation in those institutions is very similar to that which exists in the Federal Reserve system. The tendency of such participation is merely that of giving to the bank a quasi-public character, and of assuring the rank and file of the people that the institution is to be operated not for the benefit of any particular group or section in the community, but in the interest of all. In the main it may be said that the success of this kind of government participation has been tolerably satisfactory and that it represents to-day the best type of

relationship between the public and the banks. It should be emphasized, however, that success with this type of participation depends entirely upon the choice of capable, public-spirited, and well-trained men to represent the government in its banking functions.

III. Government Supervision of Banks.

The second type of participation, already enumerated, is that in which the government is merely a supervisor or director of the various banks, and as such acts in a negative way only. Of such supervision the best example to be found is that afforded by the national banking system prior to the adoption of the Federal Reserve system, although on a smaller scale equally good examples are afforded by the state banking systems of the present day. In all of these (and in the national banking system as well) the basic thought is what is called "free banking." Individuals are allowed, under specified conditions, to apply for and receive banking charters. Their operations as bankers must, however, be governed by more or less elaborately developed laws. The National Bank Act, as considered in Chapter XII, requires the maintenance of specified amounts of reserve, limits investments in certain ways, controls the amount of loans that may be made to given individuals or corporations, and otherwise restricts the operations of banks. It could not be expected, in cases where perfectly free banking is permitted, that all those institutions which are allowed to operate would invariably comply with the law. Some would not do so because of lack of knowledge, others because they did not fully understand or interpret the requirements by which they are surrounded, while still others would fail because of indisposition to comply with legal requirements. It is invariably necessary,

therefore, to have an active government officer who is charged with the duty of supervising the management of the banks and of seeing to it that such management is in harmony with the law.

The officer who, under the national banking system, performs this function is called the Comptroller of the Currency, and in the several states he may be called Superintendent of Banking or Bank Commissioner. Whatever such an officer may be called, his function, as already stated, is that of applying and interpreting the law. In so doing his method of work is usually that of requiring reports from the different institutions under his control or of subjecting them to examination at the hands of bank examiners, or both. The reports when completed are forwarded to the Comptroller at Washington, and in his office are carefully analyzed and compared. If the figures or the examiner's statements show any violation of law, the bank is promptly notified and asked to refrain from objectionable practices or to correct any methods that may be objected to. In other cases the bank may simply be given a letter of advice indicating possible points of danger. Should the bank fail to observe the instructions or suggestions thus given to it, the Comptroller may, under certain conditions, apply for the withdrawal of its charter; or, if evidence appears of criminal or illegal work on the part of officers of the bank, he may undertake proceedings against them individually.

On the whole, this system of oversight and reporting has worked reasonably well, the difficulty with it being found in its entirely negative character and in the fact that it was not and could not be constructive. These defects were seen at their worst during the latter years of the national banking system, when sharp competition between large banks entirely prevented any harmony of action or unity of purpose on the part of the

institutions themselves in protecting the country against disastrous competition until the moment for application of safeguards had passed. It was true that when the real danger came upon the country and a general collapse of the banking system was threatened, it was usually possible to obtain a co-operative effort designed to relieve hard-pressed banks and avoid a general crumbling of the financial structure as evidenced in bank failures. Such material aid was seen in the form of clearing-house agreements, the issuance of clearing-house certificates, and other extraordinary action of a like nature. All such necessities might have been avoided had there been constructive leadership, but this was never provided. Even under the best administration of the Comptroller's office there was never any possibility of restraining banks, which were technically within the limits of the law, from unduly extending credit, with results which have been sketched elsewhere in this volume. As a result, therefore, the Comptroller's office was usually borne along with the current of banking development, his highest ideal of success usually being to keep the banks "clean"—that is to say, free from dishonesty, from obviously irregular or excessive loans, and in as nearly sound a general condition as practicable. But this was a rather low ideal, and one which was far from meeting the conditions of a thorough and effective oversight of banking. Recognition that such was the case was the fundamental influence leading to the organization of the Federal Reserve system with its provision for participation by, or representation of, the public in banking management.

What has been said must not be taken to suggest that the system of public oversight and inspection has been a failure or can be dispensed with, but merely that it is insufficient. There is still much difference of

opinion among authorities on banking as to whether such inspection or oversight may not be best provided through a central or co-operative mechanism rather than through the efforts of governments. In the United States such difference of opinion was reflected, before the organization of the Federal Reserve system, in the action of the clearing-house associations in most of the larger cities. These associations usually had as one of their most important functions the institution of examinations for their own members. Effort was made to have the clearing-house examiner a non-partisan functionary, entirely independent of any particular institution, and simply acting as a general regulator whose duty it was to bring to the attention of the clearing-house committee conditions which were likely to prove bad or dangerous from the standpoint of banking as a whole. In some cities this clearing-house system or plan of mutual examination, when at its best, was a good deal more effective than that of the Comptroller's office, though it was always plain that this method of inspection would not have worked well outside of the larger cities. Country banks were not rich enough or harmonious enough to employ it for themselves; so that in practice the government system of inspection was always necessary. In the Federal Reserve Act, provision was made for the examination of member banks by Federal Reserve banks if the latter found it necessary. The exercise of this function has been more or less in abeyance because of the fact that the Comptroller's powers still continue to be exercised, but at any time the transfer of examination work might easily be effected.

Were it to be thus effected, examination would practically be placed upon a mutual basis and the banks would be in the position of looking after their own affairs, public opinion and the general ethics of the

profession establishing an average standard of conduct which must be observed. In foreign countries public examination and inspection has never made much headway. Its place has been taken by careful reports rendered by the banks to the government as the result of the process of self-examination, or through clearing-house examinations, or through examinations carried on by certified accountants, which no bank was compelled to carry through, but which, nevertheless, were exacted by public opinion. It may be said that the prevailing European type of examination, so far as any can be said to exist, is the statement method, and that the negative work done by such officers as the Comptroller of the Currency or Superintendent of Banks in the United States is superseded by positive control proceeding from the central bank and applied through the mechanism of the discount market. In effect this means that the banks must maintain themselves in a sound condition; otherwise they will be unable to obtain rediscount accommodation from the central bank. Bad banking is thus penalized not by legal proceedings or official reprimands, but by refusal to provide further credit for the use of those banks which are guilty of the practices complained of.

IV. Government as a Depositor of Banks.

The third elementary type of relationship between government and banking system, already referred to at the opening of this chapter, was seen in the fact that the government is itself a large depositor, and is therefore able to exercise over all banks that kind of control which customers always exercise, whether in public or in private life, over the concerns with which they trade. The government of the United States is to-day the greatest business enterprise and the largest depositor

in the country. Much the same is true of all modern nations, and it is everywhere a fact that the volume of taxation and other revenue flowing into the public coffers, and usually flowing out quite as promptly, is the largest single stream of wealth within the national borders. The question during the past hundred years has always been urgent, how this wealth should be handled and what use should be made of it. Even though it be true that the government has no large accumulation of funds that it does not need at any given time, it is a fact that there is always in the public purse a great quantity of fluid funds which are being turned in one direction or another.

V. Direct Deposit of Goverment Funds.

Three methods in general have been followed in regard to the control or management of public funds during the nineteenth century. The first and simplest plan is that of depositing funds directly in banks, just as a private person would dispose of his cash. This was the plan adopted by the government of the United States after the expiration of the charter of the First Bank of the United States. Banks were selected and deposits were made with them and payments were effected by check. The second method is that of selecting some one strong institution under public control, placing the funds with it, and depending upon it to act as a fiscal agent. This plan has now been followed by such governments as France and England, the national funds being deposited with the central banks of those countries, while disbursements were made by check as needed. The third method is best exemplified by the policy of the United States from about 1846 down to 1920, and is known as the independent treasury policy. Under it the government

established, in its final development, an elaborate fiscal mechanism and extensive vaults in which the actual money of the public was held. The government presumably received only money, passed out only money, and did its own banking by keeping the cash on hand in its own strong boxes.

There has been a sharp conflict of opinion, especially in American literature, between these three methods of procedure, and our national experience has been particularly rich in illustrating the working of these various plans. We have uniformly found that the plan of direct deposit in banks was unsound and dangerous. As illustrated by American experience, this policy usually resulted in transferring funds from parts of the country and from banks that were legitimately entitled to them because of their business requirements, to other parts of the country which were not so entitled to hold them. As a result there was a tendency toward the stimulation of unsound loans, and business was often inflated by extensions of credit that ought not to have been made at all, so that at times the government found it difficult or impossible to call back its own funds without embarrassing the depository banks and so causing a panic. A notable experience of this kind occurred after the termination of the charter of the Second Bank of the United States, during the period subsequent to 1837. This experience, however, differed only in severity and intensity from the similar experiences which had been had at other times and in other countries. It is enough to say that government officials seldom select banks as depositories wisely, and that even when they do the amounts that they have to transfer are so great that the business is likely to be beyond the strength of the ordinary commercial bank. There is thus a temptation to divide the funds up into small amounts and to dis-

tribute them politically, refraining from drawing upon those institutions that are best able to protect themselves against any use of the funds by the exertion of their influence.

VI. Independent Holding of Government Funds.

The method of independent holding of public funds as provided for by the Independent Treasury Act of 1846 was originally bottomed upon the notion that the government should accept nothing but specie and should pay out nothing but specie. It was intended to be a "hard-money" policy. This plan has proved its weakness both in time of war and in peace, the effect of it being always to draw suddenly upon the banking mechanism of the country for cash or to pour cash back as suddenly into places where such cash was not wanted. The effect was somewhat different from that of the sudden withdrawals or sudden payments under the individual bank-deposit plan, but it was even more disastrous than the former. For example, in American experience it was found that even in time of peace, when surpluses of revenue had been accumulated, the result was to make an undue reduction in the supply of money in the country, while when deficits occurred there was an undue outflow of money.

VII. Effect of Withdrawal of Cash.

The continuous fluctuation in the supply of money which grew out of such variations in public revenue was bad enough in its way and undoubtedly contributed in an important degree to the regular annual stringencies which in former years were a feature of American banking. These, however, were not to be compared in their injurious effect with the evils of the

working of the independent treasury system in time of war. As is well known, the great financial demands of governments in times of modern war invariably strain the financial mechanism to its utmost, and it may often be true that a single loan amounts to more than the entire supply of money in a country. This was true of one or more loans both in the United States and in Great Britain during the World War, when upward of $5,000,000,000 was subscribed as the result of a single offering. Any effort to collect great sums in actual coin is necessarily disastrous, because it exhausts the cash reserves of the banks and thereby drives them into a condition of suspension. At the time of the Civil War the cost of hostilities was not nearly so large, relatively or absolutely, as it became fifty years later, but the size of the loans was sufficient to compel bank suspension as a result of the effort to collect the subscriptions in cash. In fact, the independent treasury system had to be practically laid aside during the four years of the Civil War, so disastrous was its working, and after the war it had to be seriously modified in practical use by permitting the deposit of inactive funds in national banks protected by deposits of government bonds with the Treasury. This plan, however, was never satisfactory; and when the Federal Reserve Act was adopted provision was made for constituting the Federal Reserve banks agents of the government. The coming on of the European War, and later our own participation in it, compelled the Secretary of the Treasury to avail himself of the means thus held out to him for modernizing the system of the government and for putting the Treasury's relations with banks upon a business basis. In this respect, the practice of the United States is to-day practically in harmony with that of the chief European countries.

VIII. Relation to Central Bank.

In all modern countries at the present time, accordingly, the plan has been developed for placing the government's funds in a single strong bank; and as a rule the central banking organization of the country has been chosen to exercise this function. Elsewhere in this volume it has been shown that the central bank of the nation is in essence a bankers' bank. As things have developed, the relation of the government to the banks as depositor has thus practically developed into a system whereby taxes, duties, and other public dues are paid in bank credit. Under our income-tax law, for example, a taxpayer remits to the collector of internal revenue a check on his own bank. Such checks are deposited with a Federal Reserve bank and eventually result in transferring a credit from the account of the depositor in the individual bank to the account of the government in the Federal Reserve bank. The payment is thus no longer made in money, but in bank credit, and the credits of the government are carried on the books of the central bank. The "hard-money" policy is thus entirely abandoned, while even paper money is but little used in making settlements. Payments take place in book transfers, just as is the case with large settlements involving private enterprises. This modern method of transacting the government's business amounts to giving to the public authorities the right to dip into the community's store of wealth, transferring it to creditors as may be necessary, but disturbing the underlying reserves only in a minimum degree. There would seem to be no reason to suppose that the other plans already described will make headway again in practice. It should be carefully observed, however, that when the government becomes a large depositor in any banking institution it naturally as-

sumes a much closer relationship to such an institution than it otherwise would, the result being that it inevitably assumes on this account, if on no other, a right and duty of oversight or control which it might not otherwise feel called upon to undertake.

IX. Special Financial Aid to Producers.

As already seen, the relationship between the government and the banking system, as well as the banking relationship of the government to the public, includes a fourth type which deserves careful study. In a good many countries there has been, especially in recent years, a strong growth of the idea that certain classes of producers, weak industries, or businesses that were supposedly vested with a public interest, deserve special attention and support. Perhaps the best illustration of the kind is seen in the case of agriculture. Farmers in many countries have been able to put pressure upon governments in order to secure the extension of credit to them upon terms or conditions that might not be granted to others. The consequence of this demand has been, in some cases, to bring about the establishment of institutions whose function it was to furnish special banking or credit facilities for agriculture. Thus the United States provided for the incorporation of farm-loan banks in 1915, and purchased the entire stock of these banks out of public funds, while it later became a very large bondholder by purchasing the bonds issued by these banks. Still later, during the war, when it was alleged that given classes of industry could not obtain the credit support that they needed, the government organized the War Finance Corporation with the function of discounting slow and long-term paper. In 1921 it remodeled the War Finance Corporation by an amenda-

tory act (other amendments having been adopted in preceding years), so that the institution could exert itself in promoting the exportation of agricultural products to foreign countries in those cases which offered special reasons for government aid of this kind. In other countries, somewhat similar measures have from time to time been taken. Great Britain, for example, after the close of the war, organized an export credit plan whose object it was to relieve bankers of the liability growing out of unduly hazardous elements in the export trade. Various instances might be cited of action on the part of other nations intended to afford special credit accommodations either to facilitate particular movements of goods or to help out special classes in the community. It is not necessary to go into the detail of these different organizations, but their general characteristics should be noted. This is found in the fact that they constitute a diversion of capital from the channels in which it would naturally flow to others into which it has been diverted by government intervention and guaranties. The result is to transfer a part of the normal credit risks of the country out of the hands of the banks, and so saddle them upon the shoulders of the community as a whole represented in the governmental mechanism.

It is probable that the relationship between the government and the banking mechanism in modern countries will grow closer and more intimate in future years. This makes it the more important to recognize the consequences of such interference and especially to note the influence exerted by government banking schemes upon the general credit structure.

CHAPTER XXVIII

PRICES, MONEY, AND BANKING

I. Relation of Money to Bank Credit.

In preceding chapters reference has often been made to money, with only a passing explanation of its functions and uses. The most extensive reference that has been made to it in its relation to banking is found in the section dealing with reserves, where the thought was developed that one problem in connection with the reserves of the bank is that of providing always a sufficient amount of specie with which to meet current obligations that may be presented. Nothing has been said with regard to the theory of money or prices, because of the belief that this phase of the subject can best be dealt with after the reader has attained a working knowledge of the methods of banking. It is now time, however, to set forth some of the main problems of money in its relation to bank credit.

As has been seen incidentally at an earlier point, money is by many regarded as having been a development in the process of exchange which preceded credit and which certainly preceded even the most fundamental forms of banking. Without stopping to inquire further into the historical accuracy of this view of the situation, it may be admitted that the exchange of goods largely by the use of money is a step in the process of working out the modern exchange system which preceded any considerable development of banking as we know it to-day. Looking back, for example,

for about a century, it will be found that most civilized nations had accepted the view that it was the duty of governments to establish the standard of value, coin money and issue it, while it was also true that the larger part of exchanges was consummated either immediately or eventually by the actual transfer of money or its paper representatives. The concept of a banking system in which transfers of credit on the books of banks took the place of credit individually extended by traders, and in which, therefore, the liability for the soundness of credit was shifted to the bank, has been the product of the last three-quarters of a century or less. This being so, it was natural that in the earlier days of modern banking the bank should be regarded as an institution for lending money or furnishing money, and that its function should be conceived of very largely in terms of the money standard. It was equally natural that the reserves of the bank should be considered as consisting of actual money, and that solvency and liquidity on the part of the bank should be regarded as measured by the ability to command money when customers sought it. The foregoing chapters have shown the erroneous character of this idea. Still it remains true that, with conditions in the world as they are at the present time, money retains, and, so far as one can foresee, will continue to retain for an indefinite period, an important function as the means of liquidating obligations. Banks will continue to be tested by their ability to command money, and it is probable that economists will continue to theorize about bank credit as a substitute for money or as a means of avoiding the use of money.

It is at the latter point that the student who enters the field of scientific banking needs most to clarify his ideas. As the modern economic world has developed, most of its business transactions are in one way or

another connected actually or nominally with money. The value of goods is stated in terms of money even when the goods themselves are sold without the actual acquirement of any cash whatever by the seller. The level of prices is measured in terms of money and the problem of the value of money is thus fundamental in the whole theory of exchange, and hence has a vital relationship to banking both in theory and in practice.

II. Meaning of the Value of Money.

What is meant by the value of money? The significance of the term can best be understood by regarding it as the converse of the term "value of commodities." When we speak of the price of a given group of commodities as $100 we mean that they will exchange for a quantity of money or its equivalent expressed by the figure 100. The term "dollar," "pound sterling," "franc," would have no meaning were it not for statutes in the countries whose standards they are, requiring that they shall represent a specified number of grains of gold, or, in some conditions, of silver. The value of commodities then may be regarded as the quantity of standard metal, represented by a term legally defined (as dollar, pound sterling, franc, etc.), or the equivalent thereof in some other form, which they can command. Strictly speaking, however, the value of commodities expressed in terms of money is technically at least the quantity of the standard metal for which they will exchange. Reversing this conception, it is clear that the value of money means the quantity of commodities for which a given unit or amount of the precious metal which is accepted as money will exchange. Thus in the case of the group of commodities whose value was taken as

$100 above, the value of 100 is the aggregate of commodities constituting the group already referred to. The difficulty in reversing the terms and using them interchangeably lies in the fact that, whereas money is a single commodity, other items of goods vary. Strictly speaking, therefore, the value of money must be taken as the total amount of all existing commodities that can be bought at a given time, for which a unit of money would exchange. This concept, as readily appears, is unwieldy for ordinary use. Since we can never tell exactly what commodities money will be offered for, and since not all commodities are constantly or freely bought, the term "value" of money is very much looser than the term "value of goods" or "value of commodities."

III. Measurement of Value by Index Numbers.

There must, however, be a way of measuring the value of money and of ascertaining it at any given time. Since it is not possible to measure or ascertain the exchange value of money for all commodities at any given time, economists have agreed upon lists of commodities whose prices are to be taken as measuring the value of money. Thus, for instance, if at any given moment we say that a bushel of wheat is worth $1, a ton of pig iron $20, a yard of cloth $3.50, and so on up to a total of $100, we may say that the value of the precious metal contained in $100 is represented by the sum total of the units of different goods thus selected for comparison. The purpose of thus reversing the idea of value is, however, primarily that of making possible comparisons of value at different times.

The working of the index-number plan for the measurement of prices is comparatively simple. Its use is necessitated simply by the fact that it is possible

to combine or add dissimilar units only after reducing them to a mathematical base or equivalent. For instance, if it be desired to average the price of ships and clothing and vegetables, no success can be had without first getting a mathematical expression for each price. The index-number plan involves further the choice of a definite base period from which to reckon. For instance, assume that it is desired to compare the level of prices in the year 1910 with that of the year 1900. The first problem is to select the commodities which are to be taken as representative of all others. Suppose that ten such commodities are chosen and that they are, say, pig iron, copper, wool, woolen cloth, raw cotton, cotton cloth, wheat, corn, anthracite coal, and a standard grade of lumber. Evidently these prices are entirely incomparable. They will run from, say, $25 a ton for pig iron to $1 a bushel for wheat or $15 a ton for coal. The first step, therefore, is to regard these various prices as merely the base from which to figure, assigning to each one of them an abstract value of 100. Evidently, then, the combined price of these commodities in the year 1900 will be 1,000—that is to say, ten times 100, the base or equivalent price of each article. Now, if in the year 1910 pig iron instead of being $25 per ton is $30, the index number for that article will be 5-25 above what it was in the year 1900—that is to say, it will be 120. Again, if the price of wheat was $1 per bushel in 1900 and in the year 1910 turns out to be, say, 90 cents per bushel, there has been a decline of 10 per cent in value, and the index number for that article will be 90. So also if anthracite coal has risen from $15 to $20 the index number for the latter year is 133⅓. It is possible that in adding the ten index numbers for the year 1910 the declines in some articles will offset the advances in others, leaving the index number for

1910 1,000 just as it was in 1900. This, however, is very unlikely. The figures will probably show an increase or a decline. Suppose it is 1,100 instead of 1,000. Evidently the standard increase in the general level of prices during the ten years in question is 10 per cent, which we may express by saying that, with the year 1900 as a base, there has been a 10-per-cent increase in prices during the decade, leaving the index number in contrast with 1910 at 110. It will be evident to the careful reader that there are many sources of error in this way of measuring prices. For instance, the commodities chosen as representative may have been badly selected, or consumption habits may have changed during the ten years, so that, although they were well chosen at the outset, they are not very representative in the later year. There may be difficulties in the actual getting of the prices on an accurate basis. Quotations may have been readily available in the earlier year, but difficult to obtain ten years later. Some commodities may have gone out of current use. This is largely true of cotton and woolen textiles, in which methods of weaving have greatly altered during recent years. It is also true that a simple arithmetic average of the kind used in our illustration may be open to very serious question. For instance, pig iron does not figure largely in the ordinary consumption of the individual, while anthracite coal may be an important element in family expenses, but is only a minor item of cost to the inhabitants of a hotel. From all this it follows that the index-number mode of measurement is always very uncertain in its working, and at the best is never more than approximate in its adaptation to actual conditions. It is, however, the only way of measuring general changes in prices. It is always possible to trace the movement of one particular price, but to say that prices

as a whole have risen or fallen is feasible only through the use, as already explained, of some mathematical means of reducing them to a common base. That is the service which the index number performs, and that is the reason why there has been an increase in the use of these numbers—they render possible comparisons which otherwise would be out of the question. In some sets of index numbers there are employed elaborate mathematical methods of computation designed to allow for or to eliminate error. These may have a more or less sound base and hence may be more or less desirable. The general opinion of writers on the subject undoubtedly is that elaborate mathematical modifications in methods of computing index numbers have not, on the whole, justified themselves and that the simple arithmetic plan of computation is on many occasions the best plan, while in others the introduction of mathematical refinements must be sought only after the most careful analysis of the various factors entering into the problem.

IV. Quantity Theory of Money.

The question whether the supply of money directly influences prices, and if so to what extent, has figured prominently in economic discussions for many years. The so-called classical economists early evolved what was called the quantity theory of money. This, roughly stated, was to the effect that, as the supply of money increased, the money value of commodities tended to increase. As thus stated the doctrine was little but a truism, but it was a direct and natural inference that in order to raise prices it was only necessary to increase the supply of money, while in order to reduce them or to hold them in check it was only necessary to curtail the supply of money.

The theory was not very important in its direct bearings so long as the term "money" was limited to the strict and original meaning of the term—standard money, or, in a country on a specie basis, the standard money metal. As there was no artificial way of increasing the supply of money metal except by producing it, the basis of prices was thus given a kind of "natural" foundation.

Closely connected with this view of the price situation was the theory of international trade, which was worked out by classical economists in complete form. This trade theory held to the view that exports and imports over a sufficiently long period were equal, and that since "visible" exports and imports consisted of (a) goods and (b) money, a favorable balance of trade (excess of exports over imports) meant a larger incoming supply of money in order to equalize the "balance." From this, working in conjunction with the price theory already evolved, the economists deduced the view that when a country exported heavily, money came to it in large quantities, and as a result commodities tended to become higher in price. This made it a less desirable country in which to buy goods, so that there was an automatic check upon the exportations, which promptly fell off. In this way through the backward and forward movement of specie, international supplies of metal were equalized or "adjusted" to the "volume of business" developing in the various countries.

The theory began to assume a much more difficult aspect when the definition of the term "money" was broadened. J. S. Mill, a strong adherent of the quantitative theory of money, defined the term money as meaning volume of money, a term which, according to him, could be analyzed into two factors or elements—(1) the quantity of money in existence or available

and (2) the rapidity of circulation. This thought he expressed in the well-known formula $V = Q \times R$. Of course, from this it was fairly to be inferred that if methods of economizing the supply of money, or of making it more efficient in circulation, could be devised, the tendency would be to raise prices. Conversely, of course, changes in method which rendered money less efficient, as well as withdrawals for the purpose of hoarding or uneconomic bank reserve methods, tended to reduce the efficiency of money—that is, the supply of it or volume—and so tended to reduce prices.

A further complexity came into the theory when it was admitted that there were other factors which tended to alter the relationship between money and goods. Evidently if all commodities could be conceived as to be divided into two groups, one of which was actually bought and sold by the use of money, while the other was bought and sold by the use of book credits or money substitutes of some kind, it was a fair question whether the relation of money to goods had not been seriously altered. Some economists developed the thought that in these circumstances prices were determined in that range of trading where goods were actually exchanged against money or the equivalent of money, while other goods were regarded as outside the general exchange field. Thus, for example, if farmer A sold eggs to the local dealer, at forty cents per dozen, such an exchange was one of the factors tending to fix the price of eggs; but if farmer A, on reaching the store, merely looked into a newspaper where he saw eggs quoted at forty cents and then purchased from the dealer tea or coffee to an amount of forty cents, there was a kind of barter, eggs being really exchanged against tea or coffee on a basis which had been determined in that range of trade where the goods were actually sold for money. Still other

economists favored a much more highly refined view of the situation in which they held that all means of exchange, including money itself, paper currency, credit media of various kinds—in short, everything constituting demand for goods were to be looked upon as making up the demand side of a price equation, while all goods which were being offered for sale, whether actually sold for money or not, constituted the supply side. The price level was determined by a balancing of money against goods, and the question whether an actual net addition to the amount of metal in circulation would or would not increase the level of prices depended upon whether there were or were not offsetting factors that came into play. About all that could be definitely said of this theory was that it held that additions to the actual supply of money tended, "so long as other things were equal," to raise prices, while a subtraction from the supply of money tended to reduce them.

V. Banking and Paper Money.

In any of these views of the price situation there was clearly an important public side of banking not ordinarily thought of by the customer or patron of the bank, and which consisted in the furnishing of what is ordinarily called "paper money," also usually described as "currency." There are several kinds of paper money of this sort, but only three need be mentioned at this point. One is the so-called irredeemable paper currency which is from time to time issued by governments that find themselves under the necessity of quickly getting some means of meeting pressing obligations. The well-known greenbacks issued by our own government during the Civil War afford an example of such currency. These were irredeemable for about

seventeen years after they were first issued in 1862, but later the government, in 1879, began redeeming them in gold and has continued to convert them either into silver or gold practically at the will of the holder ever since.

There are many other examples of irredeemable paper currency issued in different countries of the world which might be cited as an example, but there would be no use in recapitulating them here. It is enough to say that such notes, when issued, are merely direct obligations of the government which issues them, and that they have no relation to banking. Indeed, under such circumstances banks usually find it necessary to receive and pay out such notes as if they were coin, holding them in their own vaults in the same way. The second type of notes or currency is seen in our gold and silver certificates. These are merely in the nature of warehouse receipts, evidencing the possession by the holder of a given quantity of gold or silver coin which the government is retaining behind them. Gold certificates are now legal tender, but in any case they merely represent a claim to a specified amount of coin which is held in trust behind them. The notes issued by a bank are, as has been seen in an earlier chapter, an entirely different kind of currency because they come out as the result of a need for means of transferring goods, and are thus protected by the obligations of business men, while at the same time they are limited in amount because they are presumably never issued without having a full backing or protection which keeps them sound and safe for the holder. Nevertheless, the fact that the notes themselves are issued and are used by the public means that a correspondingly smaller amount of coin is likely to be called for or used by the public. This is why the bank note is ordinarily spoken of as a "substitute" for money.

It is a supplement to, rather than a substitute for, money, but the fact remains that if it were not for the bank note there would be a greater need for other media of exchange, so that in a certain sense the bank note has a monetary function. It is for this reason that in countries which have carefully regulated banking systems special effort is made to protect the notes in an adequate way, and to make sure that innocent holders are subject to as little danger as possible. On the other hand, it is also true that there is a very general effort in all systems of legislation to make sure that bank notes, like money, are receivable everywhere throughout the country at their face value and without any charge for exchange.

VI. Banking and Prices.

There is a subtler relationship between the bank and the community than this function of furnishing a medium of exchange. It, however, grows out of the latter phase of bank activity. If a bank actually puts out something which is used instead of money, and if it be true that the quantity of money in circulation has an influence upon the rate at which money exchanges for goods, the question may be asked whether it is not true that the bank has an important influence in raising or lowering prices. Before this question can be answered very satisfactorily, however, it is necessary to remind the reader that goods are exchanged not only through the use of money or bank notes, but they may also be exchanged by action of bank customers in drawing checks upon deposits which have been credited to them upon the books of banks. It would seem, then, that both when they issue notes and when they create deposits on their books the banks provide a means of exchanging goods, and so tend to enable the

community to do without money, and that they thus influence prices. The question whether banks by furnishing paper currency do not act upon prices should thus be put in a rather different way by inquiring whether banks do not, as a matter of fact, by extending credit in either form—notes or deposit accounts—act upon prices. As to this there can be no question. When a bank gives to an individual funds in the form of notes or deposits which enable him to buy more freely, it enables him to make an effective demand for commodities. If the customer makes use of this demand the effect is to raise prices. Conversely, by withholding credit the bank tends to hinder the customer from making his demand effective, and so tends to prevent prices from rising, or tends to lower them, relatively speaking.

It should be noted in this connection that the bank does not in such case create purchasing power or make something out of nothing. It simply recognizes the existence of value, and enables that value to become effective. The service rendered is somewhat like that of a railway. If at point A there is a shortage of food while at B, one hundred miles distant, there is more food than is needed, a railway line between the two places will enable those who have an excess of supplies to transfer them to those who need them. The railway does not create the food, but it merely renders exchange more quickly possible than would otherwise be true. In a certain sense it may be said that the working of the road tends to lower prices in the town where scarcity exists by bringing food from another point, but this, of course, is on the assumption that the food exists and is ready to be shipped. Bank credit enables commodities of one kind to be more freely exchanged for others. It can be seen, however, that if in the two points A and B of which we have spoken

there was scarcity of certain things and abundance of certain other things, the railway might simply permit shipments in one direction which were offset by shipments in another, with the result that some prices would be higher and some would be lower in A than would otherwise have been the case, while a like situation would prevail in B. The railroad in this case would have tended to bring about a more uniform level of prices in the two places and to adjust prices to one another more accurately in each place. This is exactly what banking does. Its effect, in other words, is to raise some prices and lower others, and so to eliminate fluctuations. This is a different kind of influence from that which is ordinarily ascribed to banking in its monetary relations, but it is a highly important service and one whose value to the community can scarcely be overestimated.

Banks, however, may be inefficiently or badly managed, and as a result they may grant credit (notes or deposits) to persons who are not entitled to them—that is to say, who have not the actual value which will enable them to settle their obligations. On the other hand, banks may give immediate purchasing power (notes or deposits) to borrowers who are solvent in the sense that they have wealth which will eventually be realized, although not for a long time. In this case what the banks do is to give persons with long-term wealth a chance to consume immediately. The result is to disturb prices rather than to average them, and this is what takes place in a period of inflation. Credit is too readily granted and results in enabling many persons to buy and consume commodities when they are not, economically speaking, in position to do so. The result is unduly high prices—usually followed later on by unduly low ones. The bank's influence here has been reversed—instead of averaging or

smoothing out price levels it has accentuated their fluctuations. A situation of this kind is often spoken of as if it showed that the explanation of the influence of bank credit upon prices already given were in some way erroneous. The contrary, however, is the inference to be drawn from it. Bank credit exerts a certain kind of influence upon prices, but, as with every force, this influence may be used to lessen disturbance or to increase it. The theory of its application, however, is the same in either case.

VII. Banking and Exchange.

Whether it be regarded as merely rendering money more efficient, enabling a unit of money to perform a larger number of exchanges, or as permitting exchanges to take place without the use of money, the effect is about the same—that is to say, banking tends to create a condition of exchange in which it is easier to dispose of goods, or in which goods are enabled to command the widest possible market. This being granted, it is clear that the effect of banking is to bring about an equalization of the demand for and supply of goods. Improvement in banking methods tends to render this equalization process more perfect, and thus enables the owner of goods to command a return corresponding more truly to the real exchange value of his product than he otherwise could get. Of course the reverse set of factors would tend to bring about the reverse situation. If banking credit be freely extended to borrowers the effect of it is that of rendering the borrowers' wealth, whatever it might be, more readily available as purchasing power. For example, if A owned 1,000 kegs of nails, it might be quite impossible for him to exchange even a small part of them for food or clothing at any given time. He could do so only if

he found an immediate demand for nails either in his own or some other community which he could reach. If, however, he could convert the nails into credit on the books of a bank, the bank would have practically guaranteed that the nails would have a certain purchasing power in the market, the understanding being, of course, that in the event of the bank's judgment proving erroneous the borrower would make up the difference out of other wealth of which he might stand possessed. It is at all events safe to say that the effect of banking as already indicated is to perfect exchange and hence to enable commodities to gain their widest market.

Just here the question arises whether the analysis which has just been given is not based upon the assumption that the bank can always recognize value and that it can correctly appraise it. The answer, of course, must be in the negative. Banks are not always, even with the best application of judgment, wise in estimating the value of goods. If sugar, say, is sold at ten cents a pound, it is too much to expect the bank to be able to predict a decline in the price of such sugar to, say, five cents per pound. If the bank, however, converts the sugar into purchasing power at the rate of ten cents per pound, giving the credit on its books, it has enabled the owner of the sugar to act in the market as if he had definite assurance or certainty that the sugar would be worth ten cents a pound up to the time that he disposed of it. When banks are overconfident in their estimates of future value and grant to each applicant an undue proportion of credit on the strength of goods offered to them as security, or when they accept goods that are not really salable as the basis for such advances, they place in the hands of the borrowers purchasing power which the latter are not entitled to—that is to say, purchasing power which

the owners of the goods really do not possess. In this case the borrowers are given a control over the commodities of others which they ought not to have, and if they exercise or apply it they are able to make an artificial demand for the commodities of others. The effect of such action on their part is to raise prices, and the resulting condition is called inflation. Withdrawal of such support by banks, and the restoration of the price level to the point it would have occupied had not such extensions of credit been made, is called deflation.

The bank is thus seen to possess a very broad and far-reaching power over prices which, although self-corrective in the long run, may be used for a time to distort the normal price level. The classical theory of banking holds to the view that this danger is limited or largely avoided if banks are constantly compelled to redeem their outstanding credits in money. As prices rise, more money is needed for circulation in order to exchange actual goods. This tends to draw out cash from the vaults of the banks, and their ratio of reserve to liabilities becomes smaller. Thus the banks are led to contract their liabilities. The safeguard which is thus supposed to exist is, however, temporarily absent if redemption is suspended or if the movement of specie out of and into a country is checked or interfered with. It is entirely lacking when banks are relieved of the necessity of redeeming their obligations, as they were during the European War. In such circumstances the automatic relationship to money disappears and bank credit becomes an independent factor in the price equation.

The question properly to be asked in this connection relates to the standards or measures which banks can or should apply in determining whether the credit extensions they make are likely to have the moderating

influence already spoken of or the disturbing influence. It seems to be assumed by some writers that there is no definite means by which the banker can assure himself of the effect of the credit he grants, so that as a matter of fact he can never be certain of the social influence produced by his work. This is an erroneous view of the situation. There is a perfectly safe and reliable guide which can almost invariably be applied by the banker. If the credit that he grants is for a period not longer on the average than the period of commercial credit in his community, his extension of credit will tend to bring about a steadier, smoother flow of goods from producer to consumer, and so will tend to "even up" prices. If, on the other hand, the period of credit allowed by the banker is much longer than that which is necessary to bring about the transfer of goods from producer to consumer, the banker is practically supplying the producer with capital, or in other words is enabling him to keep turning over his operations. In this case the counter effect of the credit already spoken of sets in. It may easily be that in any given loan or at any given moment the banker may find it difficult to decide whether his extension of credit is safe or sound or not, or whether it is being used to bring about fluctuations of prices. An analysis of the general portfolio or body of investments of the bank, however, always shows the real character of the average credit extended by the banker and gives him an unquestionable standard of judgment. If his loans are constantly growing longer, being renewed and seldom completely liquidated or cleaned up by the borrowers, the banker is in what is technically called an "overextended condition." In such a case the bank is tending to accentuate price fluctuations.

Recognition of this important function on the part of the bank has led in some quarters to a demand for

government regulation of banking, or to complaints that a money autocracy or money trust was able to control the business of the public, enhance prices (or reduce them), or otherwise work against the public interest. Whatever might be the abstract possibility of the creation of such a "trust" experience shows that it cannot carry matters as it chooses for more than a very short time, and that mistakes or unwise policies in banking simply react upon the banks themselves. The banks, in other words, are not the proprietors of "money," but they are service institutions whose function it is to exchange goods. They prosper as their customers prosper and suffer as the latter suffer. Governments have no means of testing credit or of ascertaining whether it is being wisely or unwisely extended, except those that the banks themselves have devised and furnished. The whole history of money and banking is adverse to government interposition in or management of banking. As we have already seen, most modern banking systems provide for some participation or oversight by the government, but this is rather to insure fair play, avoid possibilities of favoritism, guarantee thorough examination, and otherwise maintain the rules of the game, than it is to furnish standards of control or canons of banking that are better or fairer than those developed by the banking business itself.

VIII. Theory of Prices.

Question is often raised as to the definitive theory of prices as generally held at the present moment. The subject is still one as to which controversy exists among economists and theorists. Without attempting to go into this controversy in any detailed way or to discuss the more difficult points of abstract theory, we may

fairly state certain points bearing upon the theory of prices which can be regarded as of general acceptance.

1. Definition. Price is the monetary expression of the value of commodities, or, in other words, it is the value of commodities expressed in terms of money; it is the ratio between commodities and money.

2. Prices are the result of a comparison of the supply of and demand for goods and money; they rise or fall according to increase or decrease, relatively speaking, of demand or supply of the various factors entering into the comparison.

3. Money constitutes a demand for goods. An increase in the actual volume of money in existence, therefore, tends to raise prices if there are no offsetting factors. Conversely, a decrease in the volume of money has the opposite effect.

4. Goods constitute a demand for money or for other goods, and an increase in them tends to lower money prices accordingly.

5. Credits on the books of banks—deposits—are theoretically claims to money and they may be regarded as constituting a demand for commodities in the same way that money is a demand for commodities.

6. An increase in the total outstanding quantity of bank credit is thus potentially a demand for commodities which may tend to raise the price of commodities, but only if it is used in actual purchases.

7. In the same way a decline in the total volume of bank credit outstanding may tend to curtail the amount of demand for commodities and may thus tend to lower prices.

8. The question whether an increase in the volume of money or bank credits will or will not affect the prices of goods depends upon several factors which influence the activity of money and credit and which determine the direction in which the purchasing power

shall be exerted. It is not true, as is sometimes supposed, that the purchasing power rendered available by a bank which grants deposit credit is exerted practically equally over the whole field of business or goods.

9. At any given moment the analysis of causes of price changes involves a considerable number of factors any one of which may have become more or less important during the immediately preceding period. The analysis or statement of the price equation at any given time is thus tentative, and can be made absolute only in given cases as the result of study and the elimination of changing factors.

CHAPTER XXIX

ECONOMIC SIGNIFICANCE OF BANKING

I. Permanence of Present Form of Banking.

A review of the present practice of banking and the elements of financial theory upon which it is founded suggests to the student of the subject certain broader considerations which must be taken into account in forming a general conception of the subject and in giving it its proper place both as an important, not to say fundamental, phase of modern economic organization, and as a highly developed department of business life. The business man is inclined to accept existing institutions for what they are, and to use and deal with them in their present form and without a very critical estimate of their significance. This is unavoidable. Business activity is immediate and practical and is concerned with the attainment of results rather than with the alteration or reform of methods.

Nevertheless, it is true that business life is progressive and that all economic institutions are undergoing a process of steady evolution and change. The broad-minded student of business, and equally as much so the broad-minded participant in business, will therefore make a far more intelligent and effective use of the institutions with which he comes into contact if he accustoms himself to recognize their broad social significance and their place in the economic organization of society.

In the opening chapters of the present volume it was

explained that the banking and credit organization of modern business is practically essential to the maintenance of the principle of the division of labor and to the more complete and full development of such division. This may perhaps be taken as unquestionable; as nothing more than the statement of a more or less obvious economic fact. From it, however, certain inferences must be drawn and upon it certain conclusions must rest.

II. Continuation of Division of Labor.

The first question which suggests itself with respect to banking in its present form is probably the recurrent question which is always asked as to all economic forms—how far is it permanent, and how far is it merely a transitional stage of activity which will sooner or later pass into another? The preliminary answer to this question is afforded when we inquire how permanent the principle of division of labor is likely to be. If it be assumed that large-scale production is a desirable feature of economic organization and that the development of skill in special lines is to be encouraged, the conclusion seems almost inevitable that a regime of continuously greater division of labor may be expected to go on indefinitely developing. This is stated with full consciousness that some theorists believe that such division of labor has been carried too far and that in the future there may be a tendency toward greater individualization of production, with a less highly interdependent relationship of the different classes of society. A more difficult phase of the question is raised when it is inquired whether division of labor on the present basis is to be regarded as largely an outgrowth of what is called capitalistic enterprise, and whether, as it advances in the scope and efficiency

of its undertakings, it may not be possible gradually to do away with what we now call individual ownership or capitalist production, and to substitute community effort or production. Such a discussion in its broad terms would be out of place here; and it is desired only to draw attention to the relation of banking to this phase of economic inquiry. There have been some theorists, especially within recent years, who have not hesitated to express the view that the use of money and credit in their present form is injurious, and to say that as industry is socialized, not only money, but also probably banking as we now know it, will become obsolete. Apparently the basis of such views is found in the thought that an omnipotent state, with the entire resources of the community in its control and with unlimited means of information open to it, will be able to assign duties artificially to given classes or individuals, and thereby to determine what shall and what shall not be produced, and the proportions in which goods shall exchange.

III. Future Position of Banking.

Supposing that such a development were possible, what would be the effect of it upon the situation of banking? It would presumably render unnecessary the present arrangements between individuals and industrial groups which are undertaken for the purpose of carrying on production by the use of credit, and of distributing the output of industry to the various consumers who may or may not be willing to absorb it in the proportion in which it has been created. The view that banking in the abstract is not a necessary occupation, but is one of those "middleman enterprises" which may theoretically be dispensed with, is probably as tenable as any other of the elements of

the theory of government activity or interposition in industry. It should be observed, however, that the gradual elimination of banking as an element in economic organization depends upon the substitution of something else which will take its place and will perform a similar service—always assuming, as already stated, the existence and probable increase of division of labor. That something which must thus be supplied is clearly an ability to adjust production to consumption, and to distribute the productive forces of society among the objects to which they are to be assigned in such a way as to bring about an even balance. Reduction of the importance of banking will be deferred, therefore, until such time as absolute knowledge of consumers' tastes, preferences, and disposition to purchase can be obtained, and until some overruling authority is able to force industry into the channels which are necessary to produce commodities in these relative proportions and to keep industrial activity out of all others. That this is a state of things which is likely to be so long deferred that it may be expected from the human standpoint never to take place, would seem to be an accurate conclusion, and accordingly the inference must be drawn that banking is, in the ordinary sense of the term, a permanent element or factor in economic life as we know it. It is not likely that an increase of state activity or the growth of socialistic practices will in any considerable degree dispense with banking as a means to the proper conduct of economic activities of society. Rather is it true that a continued evolution of the state and an increase of its functions will be successful about in the proportion in which an active and effective credit and banking system is employed for the purpose of guiding, directing, and determining the lines along which such state activity can well be directed. The probability

would seem to be that banking, far from declining in importance or being discarded, will become a more and more important industrial agency.

IV. Public Service Nature of Future Banking.

The direction of its development is not toward atrophy, but is rather toward expansion along new lines and with new purposes. These purposes are essentially those of public service. As industrial organization becomes more complex and as the effect of banking upon industry and prices is better and better recognized, it becomes more and more necessary to provide regular access to credit and not to leave such access open to chance or casual bargaining. In all institutions which have been developed as the result of modern specialization of industry, the gradual evolution has been in the direction of a recognition of public-service qualities. Two hundred years ago even ordinary roads were regarded as private property and tolls were charged for passage over them. The same was true of bridges, and when railroads came into existence it was a long time before their position as common carriers was recognized and rates and fares reduced to a standard basis, while the duty of maintaining regular service was insisted upon. In the same way banking, which began as money lending and whose service as well as the charge for it has for many years been the subject of negotiation and bargaining, is tending more and more to assume a standardized form. This standardization is seen to best advantage in the increasing unity and similarity of commercial banking requirements, in the practical identity of different types of paper, and in many other ways. It appears also in the constant demand that provision shall be made for credit for the moving of crops and for all sorts of

necessary operations which shall not be dependent upon private enterprise or activity, but shall be the result of community action. It is the perception of the public-service nature of banking, no doubt, that has led some nations and states to enter the business. The belief that access to credit has been cut off or unduly restricted by combinations of capital in order to drive individuals out of business or to promote the prosperity of others, is difficult to prove in any particular instance. It is probably seldom attempted in the crude forms that are sometimes referred to in current prints. Knowledge of economic history, however, shows how transportation was used for competitive purposes, and there is no reason to doubt that a similar misuse could be made of banking and credit. A recognition, therefore, of credit facilities as practically an essential necessity of business leads further to a recognition of full public-service character, and hence to the safeguarding of conditions under which banks operate and under which loans may be granted.

No success has thus far been had either in regulating rates of interest or in controlling the conditions under which loans are made or the amount of accommodation to be extended on specified security. Public-owned banks when organized have been unsuccessful in the majority of cases. Better success has been had with co-operative banking enterprises, best exemplified in various rural credit undertakings, but even these have found their success greatest when their operations were simplest and most closely standardized, while their success has been least in those cases in which they ventured into complex transactions which were not understood by their constituents and in which the pressure to attempt difficult or impossible operations was too great to be resisted. Public management of banking, or even the application of absolutely rigid requirements to it

in the sense in which such requirements are applied to transportation companies, is certainly a long way in the future.

V. Recognition of Public Service Nature of Banking.

Meantime, however, progress toward a condition which may render unnecessary further intervention on the part of the government is rapid. The best bankers are more and more recognizing that in addition to their duty to stockholders and to depositors they also owe a general duty to the community, since the maintenance of solvency and convertibility has been intrusted to them, and since they therefore are in charge in a peculiar sense of the regulating economic mechanism of society. Gradually the tendency among the ablest and best men in banking is toward the granting of credit as a matter of routine upon the presentation of specific kinds of security or the establishment of a certain level of operations, as shown by a suitable statement, and the abandonment of the type of operation in which credit was granted merely because of personal considerations. It still remains true that a certain class of bankers are in the habit of talking vaguely about the importance of "character" as a basis for borrowing and its superiority to collateral as a protection for loans. In this, as in all such expressions, there is a substratum of truth. No banker wants to make loans to a borrower who he knows is dishonest, no matter how valuable the collateral offered.

On the other hand, no banker has the right to lend funds intrusted to his charge to a customer of "character" but who has no definite protection for the funds or wishes to apply them in speculation. Banking is essentially a fiduciary occupation, and as this is more

and more recognized the basis of credit comes to be better and better established and the extension of credit less and less a matter of favor or "character," and more and more a matter of routine. This is as it should be, and eventually it may be expected that credit will be a purely scientific study, and its extension —the "lending of money"—will be a routine process dependent entirely upon submission of proper evidence of ownership or value or of a definite volume of business, by the applicant for credit. The cliques and groups which in isolated cases now "manage" banks in their own interest and divert the funds hither and thither for the promotion of their own enterprises will gradually be discredited or driven from business through the tightening of legislative requirements, and perhaps through the direct intervention of the government.

Probably governmental supervision and control of transportation would never have gone so fast or so far as it has gone had transportation managers been ready to undertake their responsibility as public servants. Much the same may be said of banking. In the case of banking, however, there is a much broader possibility of competition and self-protection than could ever be true in transportation, especially in those countries where free banking has taken definite root. Nevertheless, the struggle of the future in connection with banking will aim to secure gradual enforcement of the idea of the public quality of the profession and the elimination of those transactions and dealings which have heretofore been possible by reason of the low conception of banking and the improper use of funds of the public placed in the hands of boards of directors. Banking, in short, during the next quarter century will pass through a period of discussion and controversy designed to determine how far public intervention shall go in the management of the busi-

ness, and the progress of such public intervention will depend entirely upon the progressive capacity of bankers themselves. As already stated, a hopeful sign of the times is that so widespread and general a perception of this situation exists among financiers and that there is so large a percentage of them who stand ready to accept their full duty to the community.

VI. Adjustment of Relations Between Industry and Banking.

In one way or another banking will undoubtedly become a larger and larger, as well as a more usually employed, mechanism in connection with business, and from the practical standpoint the problem of its development will be that of adapting it to different phases of economic activity and in such a way as to fit these activities in with the general scheme of things so as to produce a harmonious development. By way of illustration we may take the case of the farmer, who for many years past has been so extensively regarded as the special beneficiary of the nation. In the case of the farmer the problem of credit is first of all the same as that of any other producer—to supply him with that amount of credit he legitimately needs in the conduct of his business. Secondly, the farmer's credit problem includes the provision of proper means for holding and marketing the crop over a reasonable period. Thirdly, the farmer is also a consumer, and a proper credit system for him includes definite provision for a reasonable length of time in financing his purchases, pending the acquirement of income sufficient to pay for them—in those cases, of course, where they represent a productive investment, as with seed, farm machinery, etc.

We now have in many countries a more or less

adequate means of providing long-term credit for the farmer as a purchaser of land. In most countries we lack adequate farm marketing credit. This is now in process of development in the United States as well as elsewhere, and it may be expected that within a reasonable term of years due provision will be made for enabling the farmer to dispose of his crops steadily and regularly without the necessity of sacrifice sales or undue losses resulting from a narrow market or the disposal of the product to a single man. As this system of rural credit is developed it will be adapted to the general commercial banking system in such a way as to permit it to draw fully and fairly upon the general pool of resources, but at the same time to avoid drawing off more than the proportionate share of fluid funds to which the producer of agricultural goods is entitled. There are similar problems of banking and credit to be developed in nearly all industries. In the past the practice of regarding the banking system as "sound" when it had assumed a stereotyped form, and of denouncing it if it refused to lend upon any security except that of classical or conventional type, has been too prevalent. The future development of banking will provide largely for the working out of banking principles in connection with different branches of industry, and the adjustment of the institutions which embody or apply these principles to the combined banking mechanism of the community as a whole. This, in short, will be the important function of banking in modern economic life—the general facilitation of trade and exchange; and this will be the course of development of banking—the adaptation of banking and credit principles to the special conditions or demands of different types of industry in such a way as to apportion to each its due share of the fluid resources of society as determined by demand and supply.

VII. Future Development of Banking.

In this aspect the future development of banking opens a broad field to the constructive and ingenious man. It calls for the working out and application of well-tried principles in an immense variety of fields. It should be added, however, that as time goes on and as banking accommodation becomes better and better recognized as a necessity, there is a tendency for larger enterprises to develop their own special organizations to deal with it. Time was, as already often stated, when the business house depended almost entirely upon the advice of the banker. He was a guide and philosopher and too frequently a friend to the business man, expanding or contracting the credit of the latter as circumstances required. This function of all knowledge could be exercised only so long as the industry was in a very simple condition. It is out of the question to-day for the banker, however skilled he may be, to know very much about more than, at most, few branches of business. In the great banks a very high degree of specialization is attempted, and given officers are required to familiarize themselves with the problems of particular kinds of industry. As they become highly special in their knowledge they tend to drift into the branches of business with which they have become best acquainted, or the managers of those branches of business tend to associate with themselves ex-bankers or financial officers familiar with banking whose function it is to look after their financial affairs. Thus in many cases the great business concern finds it worth while to develop a financial department of its own whose function is that of determining its borrowing policy, the form of its borrowings, conditions under which its credit is granted, its foreign-exchange commitments, and a variety of

other matters. The importance of such financial departments of corporations is seen as the corporation itself increases in scope. In the case of some corporations it has even been thought well to develop its financial department actually as a bank or as something corresponding closely to a bank. This tendency would have gone farther, it is likely, had it not been for the complex relationships to either individuals or businesses which are assumed when a bank begins to take deposits. Therefore the corporation whose financial department has assumed an extensive and complex form finds it more expedient to organize a separate concern, which is sometimes a bank, but frequently a financing corporation charged with the duty of conducting certain operations, largely in the interests of the parent company which brought it into existence. But it will probably be increasingly true that every corporation will develop a financial branch or division whose duty it is to study credit and to manage the finances of the enterprise in the most economical manner. The effect of such development is undoubtedly that of relieving regular banks of onerous duties and responsibilities which they may not be particularly well qualified to perform, and thus of simplifying their relationship to industry. Just as many great enterprises develop self-insurance and no longer rely on insurance companies, so many other enterprises will undoubtedly develop self-banking and will rely on banks only to supply the broader and more general features of their needs. This does not diminish the importance and significance of banking, but, on the contrary, it enhances it. It suggests that whereas we may expect a very great increase in the number of banking offices and a very great diversification of the types of banking, we may also expect an individualization of banking, with the performance of banking functions by those

corporations with a sufficient scope of business to warrant them in doing so. The assumption of these banking functions will, however, as already noted, be in most cases simply applicable to the immediate financial needs of the concern itself and will not result in the taking over of duties which involve the supply of credit to the public. But the development of these individualized banking functions opens a large field of activity to those who are well equipped and expert in financial matters and offers a great and important career entirely outside of the field of banking in the narrower sense of the term.

APPENDICES

I

DEFINITIONS OF CREDIT

Adapted from J. L. Laughlin, *Principles of Money*, pp. 72–73.
(See text, p. 11)

1. Knies: "Exchange in which one party renders a service in the present, while the return made by the other falls in the future."

2. Nasse: "Credit is the confidence felt in the future solvency of a person, which enables him to obtain the property of others for use as a loan, or for consumption."

3. Jevons: "Nothing but the deferring of a payment."

4. Levasseur: "The exchange of an actual reality against a future probability."

5. Wagner: "Credit is that private economic exchange, or that voluntary giving and receiving of economic goods between different persons, where the service rendered by the first is performed from his confidence in the assurance given by the second that he will render a recompense at a future time."

6. McLeod: "A credit is the present right to a future payment."

7. Leroy-Beaulieu: "Credit is the exchange of an actual present good against an equivalent which one engages to furnish within a certain period."

8. Ferraris: "The whole of those economic and moral conditions because of which men consent to make payments in the present on the promise of repayment in the future."

9. Walras: "Credit is the lending of capital."

10. Philippovich: "Through which the one, by virtue of a service already performed (a transfer of goods, a payment, or work done), may demand from the other a return for the service."

II

OPERATIONS OF COMMERCIAL BANKS

Adapted from article by H. G. Moulton on "Commercial Banking and Capital Formation," in *Journal of Political Economy*, vol. xxvi, 1918, pp. 490–494.

(See text, pp. 21-23)

Gilbart: "Providing safety-deposit vaults; paying interest on deposits; making loans; exchanging funds between places; changing currency denominations; collecting notes and drafts, etc."; he also adds that in connection with the receipt of deposits and the making of loans bankers gather together money in small sums and transfer it in larger amounts to borrowers engaged in "trade and commerce."[1]

Dunbar: "The bankers created no new wealth by their lending and deposit holding, but . . . they directed the existing capital to the enterprises and industries most in need of support, and they quickened the succession of commercial and industrial operations. A given amount of capital was thus made more effective, so that the result of the introduction of banking in any community was the equivalent of a considerable increase in capital, although not implying any real increase in the first instance."[2]

White: A bank is termed "a manufactory of credit and a machine for facilitating exchanges"; discounting is "the swapping of well-known credit for less-known

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[1] Gilbart, *The History, Principles, and Practice of Banking* (Michie's revision), pp. 213–22.

[2] Dunbar, *Theory and History of Banking*, chap. ii.

credit"; the banker "enables the most deserving persons in the community to get capital" and thus "performs a service to society by economizing tools and materials."[1]

Holdsworth: Commercial banks "receive deposits of cash, checks, and drafts, and make loans to the business public by discounting or purchasing commercial paper. To these functions may be added a third, that of providing a medium of exchange through the issue of circulating notes." Various incidental services are also listed, and he adds that a bank is a manufactory of credit. "Business credit cannot be conveniently used for current business transactions, but bank credit in the form of checks and drafts is widely acceptable."[2]

Scott: "Customers of a commercial bank sell to it their surplus cash and credit instruments representing payments due them from other persons, and make loans from it secured by their personal notes due in the future. For the amounts due them as a result of these transactions they are credited on the books of the bank in a form known as deposits. . . . Making loans and discounts is a function correlative with that of conducting deposit accounts. It may be described as the process of advancing funds on the security of personal notes and bills of exchange . . . and on collateral."[3]

Laughlin: "The business of the bank consists of dealing in the commercial paper which grows out of current transactions. When a man desires funds for a long period, he should get them, not from the bank, but from those who have spare capital to invest for some considerable period of time. The bulk of banking business . . . consists of instruments evidencing claims

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[1] White, *Money and Banking* (3d ed.), p. 193.

[2] Holdsworth, *Money and Banking*, pp. 148–49.

[3] Scott, *Money and Banking* (revised edition), pp. 108, 109.

upon individuals, stated in terms of money, and resulting from operations requiring a comparatively short period for their consummation."[1]

Johnson: "The principal functions of the bank are the collection of funds of loanable capital that are available for short periods only, and the employment of such funds in call and short-term loans."[2]

Ely: "Having converted his personal credit into a bank deposit, the business man can now use it as a means of payment. . . . Ordinary commercial banking consists, in large part, of this purchase of personal credit and sale of banking credit."[3]

Fisher: "Through banking he who possesses wealth difficult to exchange can create a circulating medium based upon that wealth. . . . To put it crudely, deposit banking is a device for coining into dollars land, stores, and other wealth not otherwise generally exchangeable. Something of equivalent value is behind each loan, but not necessarily money. The note (or deposit) holder's promise (his promissory note) is secured by his assets; and the bank's promise (the bank note) is secured by the bank's assets. The noteholder has 'swapped' less-known credit for better-known credit."[4]

Fetter: "The essential feature of a bank is the lending of its credit. . . . The process of lending credit is called 'deposit and discount.' . . . The bank is a tool performing services similar to those of money. . . . The gathering of loanable funds by the banks, making them available at once, reduces hoarding, makes money move more rapidly, and creates a central market between borrowers and lenders for the sale of credit. While not creating more physical wealth directly, it adds to the

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[1] Laughlin, *Banking Reform*, p. 76.

[2] Johnson, *Introduction to Economics*, p. 286.

[3] Ely, *Outlines of Economics* (revised and enlarged edition), p. 247.

[4] Fisher, *Elementary Principles of Economics*, pp. 169, 171, 173.

efficiency of wealth; it oils the bearings of the industrial machine."[1]

Taussig: "Banks perform two functions, equally important, yet different. They act as agencies for the collection of savings and for investment; they create a part of the medium of exchange. . . . A savings bank has to do with investment only. . . . A strictly commercial bank is not concerned with the sort of investment to which the term is commonly limited, that which looks to the creation of permanent plant. But such a bank supplies, in English-speaking communities especially, a highly important part of the circulating medium."[2]

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[1] Fetter, *Principles of Economics*, pp. 462, 464, 465.

[2] Taussig, *Principles of Economics*, i, 331.

III

COMMERCIAL AND INVESTMENT BANKING

Adapted from W. H. Steiner, *Some Aspects of Banking Theory.*

(See text, pp. 26-27)

There is a pool of commercial financing through which effective utilization of the social circulating capital is rendered possible. The individual business enterprise contributes its surplus and obtains its deficit, the co-operative application of the capital being effected through the institution of commercial banking. There is an investment pool, as well, in which the institution of investment banking partly effects the co-operative application of the capital which is contained in that pool. Considerable difference, however, exists between the two pools. The pool of commercial financing concerns itself exclusively with the social circulating capital, while the pool of investment financing is much wider, and concerns itself with the total capital in existence and includes fixed, as well as circulating, capital. In a broad sense, there is thus included in the pool of investment financing the capital which is contained in the pool of commercial financing.

This difference in area goes hand in hand with a difference in the units between which co-operation is effected. In the case of commercial financing, we stop with the individual enterprise; in the case of investment financing, we end with the individual himself. In the first case, the lenders and borrowers are in a broad sense one and the same class; in the other, the individ-

ual is the lending unit, while the business enterprise is the borrowing unit. The underlying purposes of the two pools thus differ. The commercial pool represents co-operation by business enterprises in the employment of the circulating capital owned by these enterprises; the investment pool represents co-operation by individuals to render available for employment by business enterprises the capital owned by these individuals. In the investment pool, relative permanency is the keynote, both on the part of borrower and lender. There is not the periodic liquidity of funds which is found in the commercial pool, nor is there the frequent periodic availability and inavailability of funds—alternating periods of surplus and deficit—on the part of the individual enterprise. The flow of capital in the investment pool is more viscous. Slower change occurs in the alignment of recipients and of lenders, as well as in the general character of the investments represented. Change in the investments occurs primarily in the direction in which new saved capital is applied.

Corresponding to the difference in the fundamental purpose of the two pools is a difference in the technic by means of which the pooling is effected. The factors in the investment pool are more diverse, the structural differentiation is more pronounced, and the relative importance of the role which each of the factors plays, differs. In the commercial pool the structural elements are threefold: (1) the note broker, the discount corporation, and the finance corporation; (2) the commercial bank; and (3) the individual enterprise which either sells on time or which purchases and holds commercial paper with its surplus funds. The parallel elements in the investment pool are: (1) the trader in securities, such as the bond house (including also the corporation which resells securities with its own in-

dorsement or issues its own obligations based on these other securities); (2) the association of lenders, in the form either of savings bank, holders of time deposits or inactive accounts in a so called "commercial" bank, insurance company conducted upon the actuarial principle of reserves as distinguished from the actuarial principle of distribution of loss, or co-operative bank; and (3) the individual.

Concentrating attention upon the second element, it is seen that while banking in both pools concerns itself with the assembling of capital, only in the commercial sphere does it concern itself equally with its distribution. Owing to the character of the purposes to which commercial loans are applied, and the corresponding duration of the loan, it is possible to change the total volume of loans. On the other hand, by means of the association of lenders—depositors, the withdrawal of certain enterprises from the circle of lenders—depositors is compensated, broadly speaking, by the advent of others. Thus its funds again become available automatically to the individual lending enterprise through the commercial banking system. In the investment sphere, however, this availability is attained in another manner. Whereas in the commercial pool the discount market is primarily a question of the internal organization of the banking system, in the investment pool the security market plays a far wider role. In the investment pool the individual investor bulks large among the sources of capital supply. In general, he holds title to a specific security rather than what is in effect a claim to a proportionate share of the total holdings of a group. For him, shift of his investment is accomplished only through sale to another individual or to an association. Moreover, in case the depositors of the bank call upon it for funds, in the absence of the self-liquidating feature in its

loans and investments, it must have recourse to the security market. Thus a broad open market is indispensable, and it is in this connection that security speculation performs its first function.

Considering merely the investment pool, the forms which the "investment" of capital assumes therein are threefold: (1) ownership of securities; (2) loans on securities, made largely either to bond house or speculator; and (3) direct loans to the individual enterprise. The first of these calls for no special comment. In connection with the second, investment banking assists in directing the flow of capital into investment. This it does through loans to bond houses, which are engaged in what is in certain ways a species of commercial activity, as well as by providing capital equipment to the basic value element in the securities involved, during what we may term the process of "seasoning." In the latter case the speculator—a special class of individual holder—supplies the fluctuating additional amount. Speculation here performs its second function—namely, that of directing the flow of capital into investment. Turning to the last form of investment, direct loans to the individual enterprise, in order to involve the time element, are practically made for employment as fixed capital. There is, however, a shading in time, both of loan and of operation to which the same is applied, between such loans and commercial loans, and a large twilight zone exists.

IV

LIMITATIONS ON LOANS BY NATIONAL BANKS

From the National Bank Act as amended, the Federal Reserve Act, and other laws relating to national banks. Section 5200 (as amended 1919).

(See text, pp. 144-46)

"The total liabilities to any association of any person or of any company, corporation, or firm for money borrowed, including in the liabilities of a company or firm the liabilities of the several members thereof, shall at no time exceed 10 per centum of the amount of the capital stock of such association, actually paid in and unimpaired, and 10 per centum of its unimpaired surplus fund: *Provided, however,* That (1) the discount of bills of exchange drawn in good faith against actually existing values, including drafts and bills of exchange secured by shipping documents conveying or securing title to goods shipped, and including demand obligations when secured by documents covering commodities in actual process of shipment, and also including bankers' acceptances of the kinds described in Section 13 of the Federal Reserve Act, (2) the discount of commercial or business paper actually owned by the person, company, corporation, or firm negotiating the same, (3) the discount of notes secured by shipping documents, warehouse receipts, or other such documents conveying or securing title covering readily marketable nonperishable staples, including live stock, when the actual market value of the property securing the obligations is not at any time less than 115 per centum of the face

amount of the notes secured by such documents and when such property is fully covered by insurance, and (4) the discount of any note or notes secured by not less than a like face amount of bonds, or notes of the United States issued since April 24, 1917, or certificates of indebtedness of the United States, shall not be considered as money borrowed within the meaning of this section. The total liabilities to any association, of any person or of any corporation, or firms, or company, or the several members thereof upon any note or notes purchased or discounted by such association and secured by bonds, notes, or certificates of indebtedness as described in (4) hereof shall not exceed (except to the extent permitted by rules and regulations prescribed by the Comptroller of the Currency, with the approval of the Secretary of the Treasury) 10 per centum of such capital stock and surplus fund of such association and the total liabilities to any association of any person or of any corporation, or firm, or company, or the several members thereof for money borrowed, including the liabilities upon notes secured in the manner described under (3) hereof, except transactions (1), (2), and (4), shall not at any time exceed 25 per centum of the amount of the association's paid-in and unimpaired capital stock and surplus. The exception made under (3) hereof shall not apply to the notes of any one person, corporation or firm or company, or the several members thereof for more than six months in any consecutive twelve months."

V

INTERBANK LOANS

Adapted from articles by W. H. Steiner, in *Federal Reserve Bulletin*, June, 1920; January, May, 1921.

(See text, pp. 182–84)

The methods which are followed in extending accommodation to banks differ in important particulars from those followed in extending accommodation to mercantile houses. With the latter, borrowing is assumed to be a natural and recurring operation. The general situation of the enterprise is considered, and on this basis a line of credit is extended. Borrowing by a bank, however, is usually not so regarded. Instead of viewing its transactions as a whole, and on this basis determining the line of accommodation, it is desired rather to go back to the general operations and to consider the specific transactions which occur. This is the case to the extent at least of having the paper representing these transactions as collateral, and analyzing these bills receivable to some extent. In consequence, no line of credit is generally fixed, but each individual case is considered on its merits, specific amounts being granted as needed. The line of credit is therefore employed only in a somewhat restricted sense. The position which is taken with respect to bank borrowing is well stated by one institution as follows: "We avoid as far as possible suggesting lines or limits as to the extent we would serve the borrower, simply indicating our disposition to fully meet their reasonable requirements in liberal proportion to bal-

ances maintained and with due regard to the amount of their capital investment and borrowing elsewhere, but frequently the borrowers suggest lines themselves which are agreed to if circumstances warrant, conditioned on everything continuing satisfactorily." Some institutions, however, make it a regular practice to fix lines for their bank as well as for their mercantile accounts, while some institutions fix lines only for those banks which are regularly in need of funds each year. The amount loaned is also limited in the case of national banks by Section 5202 of the revised statutes, covering indebtedness for loans or rediscounts, other than with the Federal Reserve banks, to the amount of unimpaired capital, and in many states there are provisions covering this matter.

The practice of institutions with respect to credit files on their bank accounts differs greatly. Some institutions keep a very elaborate file, whereas others rely much more largely upon the general acquaintance which the individual officers in charge have with the account. In a broad way the information which is considered is composed of the following: (1) statements of the institution; (2) experience of other institutions with the subject; (3) agency reports, which are, however, frequently not obtained; (4) reports of representatives; and (5) miscellaneous data such as newspaper clippings, special memoranda concerning the handling of the account, etc. New York banks in particular pay much attention to the experience which other institutions have had with the subject, and inquiry is usually made from a number of the latter's correspondents concerning the general standing of the bank in the community, its prospects, etc., the character, ability, and conservatism of its management, and the relations which the bank has had with the subject. Some of the Western and Southwestern in-

stitutions, which are in much closer contact with their borrowing accounts, do not make it a practice to communicate extensively with their correspondents, nor do they regularly employ representatives as in the case, for example, of New York banks.

Borrowing, in general, is of two classes—(1) for seasonal needs and (2) for extraordinary needs and special purposes. Banks generally insist that the borrower clean up its loans for a reasonable part of each year. The seasonal clean-up is, of course, pronounced in those sections of the country in which the crops bulk largest. In these sections the time of crop moving fixes the date of liquidation of the loans, and the maturities must be adjusted accordingly. Temporary accommodation will also be granted where unexpected or large withdrawals of deposits occur, or in the past in connection with government finance. In a few cases continuous borrowing is permitted where banks are located in large cities which lack sufficient banking capital to meet continuous borrowing demands. In granting accommodation, the lending bank considers prominently the profitableness of the account to it, as represented in particular by the balance which is kept with it.

Accommodation may be obtained in a variety of forms. Paper may be rediscounted or a loan may be made. This loan may be unsecured, or else secured by collateral consisting either of bills receivable or of securities. Loans may be made on demand or for a fixed maturity. Finally, the accommodation at times may be extended in a special form, such as through the use of the certificate of deposit, or by sale of securities or bills receivable with repurchase agreement.

The general practice is to extend loans rather than to grant rediscounts. There are relatively few unsecured loans. Collateral is desired for the assurance

of safety which it gives. Banks on the whole differ in their preference with respect to the kind of collateral, some preferring bills receivable, while others prefer securities, but on the whole the collateral consists mostly of bills receivable. In the agricultural sections few securities are used. The use of collateral permits a margin which provides further protection to the lending bank. This varies very greatly with the individual case, the customary margin perhaps running, however, from 10 to 25 per cent.

Practice also differs with respect to the maturity of loans. Some institutions usually have demand loans, while others strongly prefer loans for fixed periods. This varies somewhat, according to the form of collateral employed, and loans on bills receivable are usually for fixed periods. A favorite maturity is 60 to 90 days. The collateral is generally held by the lending institution, although in the case of banks in distant parts of the country another institution may hold it under trust receipt. The collateral is generally returned shortly before maturity to the borrowing institution.

Borrowing against certificate of deposit is relatively rare, although in New England, on the Pacific coast, and in the Northwest it is still stated to be frequent. In some cases, also, officers or directors may arrange for accommodation on their own note, or else may indorse the borrower's paper in order to provide added strength. Purchase of securities or bills receivable under repurchase agreement is at times also found, and this may be done for special purposes, such as in connection with taxation. Most of the special forms of accommodation may be traced to a continuance of the prejudice which formerly existed against banks showing bills receivable or rediscounts in their published statements.

VI

THE NEW YORK CALL-MONEY MARKET

From the *Federal Reserve Bulletin*, April, 1920, pp. 369–371.

(See text, pp. 191-92)

Definition of call loans.—Collateral call loans, in the general acceptance of the term, are made chiefly in New York City, which is practically the only important call-money market in the United States. They are loans which are payable on demand of the lender without previous notice, secured by the pledge of investment securities, *i.e.*, stocks and bonds, generally those which are dealt in on the New York Stock Exchange. The interest rates on these loans, as on other classes of loans, are on the basis of a rate per annum.

The borrowers.—The loans are made for the most part to houses which are members of the stock exchange and the money so borrowed constitutes a portion of the funds employed ordinarily in purchasing and carrying securities for their customers and sometimes for themselves.

The lenders.—The principal supplies of money for collateral call loans are loanable funds of banks and bankers located both in and outside of New York City, including foreign banks and agencies of foreign banks; and similarly the loanable funds of firms, individuals, and corporations seeking temporary investment. The proportion of the whole fund loaned by these several interests varies seasonally and in accordance with the attractiveness of other opportunities for investment,

either locally or in other markets. The bulk of call money is lent on the floor of the New York Stock Exchange at "the money post," where through various brokers loanable funds are offered and bids for funds are received. Most of the business is done between the hours of 12 noon and 2.45 P.M. The important relation to the money market of the present system of daily settlement of balances resulting from the purchases and sales of securities on the stock exchange will be discussed more fully hereafter.

Commercial requirements have the prior claim.—In the matter of the supply or attraction of funds to the call-money market, there is generally a definite and well-understood obligation on the part of banks to accommodate first their own commercial clients, so that it is only the excess of loanable funds which they may have from time to time that is available for the collateral call-money market or for the purchase of commercial paper in the open market. This excess of loanable funds available for employment in the securities market varies, therefore, according to the commercial requirements of the country. It has long been recognized that for assurance of a sufficient amount of money to finance the volume of business in securities, reliance cannot be placed on a rate of interest limited to the rates which obtain or are permitted in commercial transactions whose prior claim on banking accommodations is universally conceded.

CAUSES AFFECTING PRESENT CALL-MONEY RATES

The reference in the congressional resolution to high rates for call money in the financial centers and the inquiry as to their causes require, it is felt, a survey of the operations of the money markets and the reflection therein of the underlying economic conditions which

govern, in varying degrees, all money rates, including those for call money.

Present changed conditions of supply.—In former times, and specifically prior to the institution of the Federal Reserve system, bankers, especially in reserve centers, were accustomed to look upon call loans as their principal secondary reserve on the theory that inasmuch as those loans were payable upon demand, funds so invested could always be promptly obtained on short notice to meet withdrawals of deposits or for other use. In these circumstances there was ordinarily available for collateral call loans a supply of funds sufficient for ordinary market requirements and at low rates, although at times the rates rose to high levels as the supply of funds diminished, or the demands increased.

This attitude of the banks toward call loans as their chief secondary reserve has been greatly modified by two causes. The first was the closing of the stock exchange at the outbreak of the European War in the summer of 1914, when it became practically impossible to realize on call loans secured by investment securities, which became, therefore, "frozen loans." This resulted in a more or less permanent prejudice against dependence upon call loans as secondary reserves. The second and more important factor was the creation of the Federal Reserve system.

Under the terms of the Federal Reserve Act provision is made for the rediscount of commercial paper, but the rediscount of loans for the purpose of carrying investment securities, other than United States government obligations, is excluded. Consequently, in order to maintain maximum liquidity, with suitable provision for secondary reserves that can be immediately availed of, banks, including foreign agency banks, now invest a greater proportion of their resources in assets that

can be realized upon at the Federal Reserve bank. Another changed factor in the present situation grows out of the fact that the war and postwar conditions have rendered unavailable supplies of money which formerly came from foreign banks. Since the summer of 1914, while total banking resources have largely increased, the volume of bank money available to the securities market at low or normal rates has not increased proportionately, but on the contrary has probably decreased. All of these circumstances explain in some measure the increased rates which have often been required during the past year for money loaned in the securities market.

Present changed conditions of demand.—Changed conditions are also present in the factors governing the demand for money. Prior to the armistice, agencies of government were employed to restrict the issue of new securities for purposes other than those which were deemed essential for carrying on the war. At the same time, as the Treasury undertook to sell large amounts of certificates of indebtedness and Liberty bonds bearing low rates of interest, the question arose as to whether the competition of the general investment markets might not prejudice the success of the government issues. In these circumstances, with full understanding on the part of the Treasury Department, the officers and members of the New York Stock Exchange undertook to limit transactions which would involve the increased use of money for other purposes, in consideration of which the principal banks of New York City endeavored to provide a stable amount of money for the requirements of the security market.

After the armistice these restrictions were removed and ordinary market forces reasserted themselves. The issuance of new securities was resumed in unprecedented volume and consumed a vast amount of capital and

credit when bank credit was already expanded by the necessity of carrying large amounts of government securities which the investment market was not prepared to absorb. Thus arose a further cause for the increased cost at times of accommodation on collateral call loans.

Since the armistice these causes have been augmented by the increased volume and velocity of transactions in securities generally. Before examining the figures, it should be explained that the amount of call money employed by the securities market fluctuates according to the amount of other funds available for this purpose, *i.e.*, customers' money invested and time money borrowed, and also as the volume of business varies.

Volume.—The volume of money outstanding on call is more or less constant, fluctuating only over relatively long periods, and the amount which is loaned from day to day is but a small proportion of this constant volume. The constant volume of outstanding call loans bears a rate of interest which is determined daily and is known as the renewal rate. The daily borrowings, either in replacement of loans called for payment or representing new money borrowed, are made at rates which may or may not be the same as the renewal rate and which frequently vary during the same day.

Turning to the figures, it appears that over a period of years during the prewar period the volume of all money, both time and call, employed in the securities market was estimated at about $1,000,000,000, of which the average on call was about 60 per cent and the average on time about 40 per cent, or a normal volume of call money, say, of $600,000,000. The daily turnover in call money, *i.e.*, old loans called for payment, loans made in replacement thereof, and new money borrowed, ranged from $15,000,000 to $30,000,000, and averaged about $20,000,000. The daily

turnover during the year 1919, however, ordinarily ranged from $25,000,000 to $40,000,000, and averaged about $30,000,000. Moreover, it is important to notice there has been a disproportionate increase in the amount of call loans, as distinguished from time money, with the consequence that the former, it is now estimated, constitute about 75 per cent of the total money employed in the securities market. At a time of such heavy credit requirements as the present the greater volume of borrowings, not only in the aggregate but in the day-to-day demands, naturally often results in high rates for the money loaned. Indeed, so reluctant have the bankers been during the past few months to supply the large demand for credit based on securities that the occasional loaning of relatively small amounts of money at very high rates often represents a desire not to secure the high rate quoted but to prevent the rate from going very much higher with the consequent demoralization which might result.

Intermittent factors.—There are certain other factors, the influence of which is principally manifested in intermittent wide fluctuations in the daily rates or in the rates which apply for brief periods. The increased volume of demand loans called daily for payment noted above, coupled with the decreased amount of time money loaned on securities, produces more or less apprehension on the part of borrowers as to their ability to reborrow money called for payment. This apprehension, quickened by the number of insistent borrowers bidding at times when momentarily loanable funds are exhausted or are offered in small quantity, frequently results in competitive bidding for funds which advances the rates for a day or part of a day beyond the actual necessities of the situation.

Another active and important influence which has recently affected the supply of funds available for col-

lateral loans and precipitated at times a rise in the rates, has been the periodic transfers of government deposits from depositary banks to the Federal Reserve banks in connection with the fiscal operations of the Treasury. Such withdrawals result in the depositary banks calling money from the securities market, which causes sharp advances in the rate bid for call money in replacement of the loans called for payment.

RATES ARE DETERMINED BY THE OPERATION OF THE LAW OF SUPPLY AND DEMAND

The underlying cause of fluctuations, and especially of increases in call-money rates, is the operation of the law of supply and demand. In other words, as the supply of loanable funds diminishes in proportion to the volume of the demand, the rate for collateral demand loans advances. However, in the case of the daily borrowings of call money—to which the abnormal high and low rates apply and which represent but a comparatively small proportion of the total outstanding loans—other factors, incidental to the temporary circumstances and conditions of the market, tend in times of stress to greater fluctuations in rates than result from the more normal operation of the law which is reflected in the renewal rate for the greater volume of the outstanding call loans. The renewal rate is regarded as the real barometer of market conditions, and its fluctuations throughout the longer periods more nearly reflect the relation between the amount of the loanable funds and the amount of the demand. In other words, high renewal rates are mainly due to other demands for credit, resulting in part from the increased requirements of the commercial community and in part from other temporary factors, such as depletion of bank reserves resulting either or both from credit expansion or loss of

reserves through gold export, speculation in commodities and real estate, and congestion of commercial transactions incidental to slow or interrupted transportation.

Commercial rates are similarly and independently determined.—The operation of the law of supply and demand is equally effective in determining the rate for commercial loans and all other borrowings. In fact, rates for commercial loans and rates for collateral loans have a common root in the law of supply and demand, and the conditions which affect one, in the main affect the other, although not in like degree, as is demonstrated by the far wider fluctuation of call rates and the higher points to which they go. The rates for call money do not determine and have not exerted an important influence on the rates for commercial borrowings. It is the universal custom of the banks to satisfy first the commercial needs of their customers. They feel an obligation to customers but none to those who borrow in the open market on securities. Besides, as the resources of the banks mainly come from the commercial customers, their own self-interest compels a preference in favor of their commercial borrowers, since failure to grant them reasonable accommodation would induce them to withdraw their deposits and so reduce the ability of the banks to do business. Although the money of the banks and trust companies comprises by far the greater proportion of the money loaned on the securities market, an examination of the prevailing rates on commercial paper at times when the call-money market is particularly strained indicates that there is littlecasual relation between the rates for call money and those on commercial loans. Exhibits Nos. 1 and 2, showing respectively the rates for call money on the New York Stock Exchange during the years 1906–1919 and the rates for commercial paper in New York for the period from 1915 to 1920 are attached. (See *Bulletin*, pp. 368–74).

POSSIBILITIES OF CHANGE IN THE CONDITIONS AND METHODS OF THE CALL-MONEY MARKET

So long as collateral call loans are made under prevailing conditions it is difficult to see how the present situation can be altered, because of the impracticability of controlling the underlying cause of high rates, which, in the last analysis, is the excess demand over supply.

An attempt to control the rates for call loans by the establishment of an arbitrary limit at a low level, without the ability to modify the causes above enumerated, which operate to increase rates, would be distinctly hazardous, for the reason that up to the point where the arbitrary rate would limit the supply of new money, speculation and expansion might proceed unchecked and the natural elements of correction or regulation would not obtain. In other words, high rates act as a deterrent to overspeculation and undue expansion of credit. On the other hand, should the supply of money available at a fixed maximum rate become exhausted, liquidation might suddenly be forced, because the demands or additional accommodation for the consummation of commitments already made could not be met. The effect of such liquidation would be to embarrass not only investors and dealers in securities, but frequently might affect dealers and merchants in commodities as well. As an example of the latter, the case might be cited of a commitment to purchase a round amount of cotton on a certain day. Many of the houses on the cotton exchange are also members of the stock exchange and frequently borrow very largely on the stock exchange against investment securities to provide funds for settling their transactions in cotton. If, therefore, when an important cotton settlement is imminent, borrowings on securities could not be availed of, the cotton transaction could not be consummated and a

drastic liquidation through sale either of securities or of the cotton might be required to avoid default. Similar consequences might obtain in the cases of transactions by members of other commodity exchanges who are also members of the stock exchange and have recourse to the call-money market.

THE IMPORTANCE OF A "CALL-MONEY" MARKET

Call money in some form is indispensable to every important financial center. There must be not only an outlet for the employment of funds temporarily idle, but a large volume of call and short-time money is essential to the successful and economical conduct of business. It is particularly essential to the international and domestic commercial business, but the diversion of the use of the major portion of such money to the securities markets is not in accordance with sound banking principles. It is to be noted that in no great world market, other than New York, is the call-money market so dependent upon investment securities and so susceptible to speculative influences. In other markets the reverse is true, as their call money is based principally on commercial paper upon which realization can be had at the central bank, at a price, in case of need. We have seen that in this country call loans on securities lack this essential quality of liquidity required for quick and certain realization, and that this fact has now been more generally taken into consideration by our lenders. But the safe and successful divorce in this country of the use of call money from dependence upon investment securities as a basis requires careful study in order that safe and adequate methods may be substituted for the present methods of the securities market.

VII

STATEMENTS OF FOREIGN BANKS

(See text, pp. 372-80)

Bank of England

September 28, 1921
(in pounds sterling)

ISSUE DEPARTMENT

Notes issued	145,044,950	Government debt	11,015,100
		Other securities	7,434,900
		Gold coin and bullion	126,594,950
	145,044,950		145,044,950

BANKING DEPARTMENT

Proprietors' capital	14,553,000	Government securities	33,360,329
Rest	3,529,568	Other securities	80,494,440
Public deposits[1]	12,231,323	Notes	20,072,370
Other deposits	105,420,935	Gold and silver coin	1,819,417
Seven-day and other bills	11,730		
	135,746,556		135,746,556

2. Bank of France

September 29, 1921
(in francs)

ASSETS

Cash of the bank:		
Gold	5,523,095,774	
Silver	277,328,503	5,800,424,277
Funds abroad		622,295,048

[1] Including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts.

Notes due yesterday	3,847,029
Portfolio of branches	1,102,785,822
Portfolio of Paris	1,426,748,591
Advances on bullion and other securities	2,188,214,223
Advances made to the government	25,100,000,000
Treasury notes	4,084,000,000
Various rentes	2,304,368,958
	42,632,683,951

LIABILITIES

Capital stock of bank and various reserves	247,310,883
Amortization account and other items	1,615,567,010
Notes in circulation	37,129,458,260
Arrears on funds transferred or deposited	55,967,455
Demand notes	873,532
Various current accounts	2,509,100,476
Dividends, interest, and other items	1,074,406,335
	42,632,683,951

3. German Reichsbank

September 30, 1921

(in thousands of marks)

ASSETS

	1921
Bullion	1,039,768
of which gold	1,023,704
Imperial debt certificates	3,128,791
Bank notes of other banks	2,613
Drafts and checks	1,142,218
Discount treasury notes	98,422,137
Secured loans	3,289
Securities	277,977
Other assets	5,994,777
	111,035,274

LIABILITIES

Capital stock	180,000
Reserve funds	121,413
Circulating notes	86,384,286
Deposits: Imperial and state	4,618,087
Private	15,362,208
Other liabilities	4,369,280
	111,035,274

4. Monthly Statement of London Clearing Banks

August, 1921

(000's pounds sterling omitted)

ASSETS

Coin, bank, and currency notes and balances with the Bank of England	209,912
Balances with and cheques in course of collection on other banks in the United Kingdom	44,466
Items in transit	......
Money at call and short notice	109,003
Bills discounted	383,280
Investments	315,476
Advances to customers and other accounts	816,724
Liabilities of customers for acceptances, endorsements, etc.	49,986
Bank premises account	25,189
Investments in affiliated banks	24,360
Total	1,978,396
Ratio of cash to current, deposit, and other accounts	11.6

LIABILITIES

Capital paid up	66,662
Reserve fund	51,673
Current, deposit, and other accounts	1,806,910
Acceptances, endorsements, etc.	49,986
Notes in circulation	3,014
Reduction of bank premises account	151
Total	1,978,396

5. Consolidated Statement of

(1) Le Crédit Lyonnais: (2) Le Comptoir National d'Escompte de Paris; (3) Le Société Générale pour Favoriser le Développement du Commerce et de l'Industrie en France

(in thousands of francs)

ASSETS

	Dec. 31, 1913	Aug. 31, 1920	Aug. 31, 1921
Cash in vaults and balance at banks	470,967	1,239,436	1,188,775
Bills discounted and short-time national defense securities	3,493,548	8,756,985	9,664,520
Advances on securities, including stock-exchange loans	1,058,257	790,750	580,395
Debits in current account	1,463,905	3,423,314	2,182,621
Securities, including rentes	63,200	79,508	68,369
Forward exchange operations[1], [2]	....	231,621	156,514
Due from banks and bankers [2]	94,277	182,986	156,294
Customers' liabilities on acceptances [2]	175,076	89,270	54,276
Financial participations [2], [3]	74,869	54,710	42,122
Coupons uncollected [3]	42,300	20,117	21,122
Agencies outside of Europe [2]	17,575	....	11,675
Real estate	101,410	106,422	106,422
Sundry assets [1], [2]	119,005	189,542	236,898
Total	7,174,389	15,164,661	14,470,003

LIABILITIES

	Dec. 31, 1913	Aug. 31, 1920	Aug. 31, 1921
Capital paid in..............	700,000	732,038*	750,000
Reserve.....................	328,861	318,780	321,748
Deposits (checking accounts, deposit certificates payable at sight, discount accounts)	2,071,097	4,785,373	4,788,837
Credits in current account.....	3,066,837	8,035,653	7,617,441
Deposits payable at fixed date.	296,865	294,228	243,649
Acceptance liabilities.........	493,032	200,829	107,330
Uncollected funds [1]...........	....	158,245	90,231
Forward exchange operations [1, 2]	....	231,621	156,514
Agencies outside of Europe [2]...	....	1,041	....
Profit and loss [1, 2]............	18,371	10,910	15,124
Sundry liabilities.............	199,326	395,943	379,129
Total...............	7,174,389	15,164,661	14,470,003

[1] Le Crédit Lyonnais.

[2] Le Comptoir National d'Escompte de Paris.

[3] Le Société Générale pour Favoriser de Développement du Commerce et de l'Industrie en France.

* This increase is due to the fact that the Comptoir National d'Escompte de Paris authorized an increase of 50,000,000 francs in its capital, of which 32,038,000 had been paid in on August 31, 1920.

6. Combined Resources and Liabilities of the Federal Reserve Banks at the Close of Business on Specified Dates

RESOURCES

	Sept. 28, 1921	Sept. 21, 1921	Oct. 1, 1920
Gold and gold certificates . .	$442,707,000	$428,036,000	$201,046,000
Gold settlement, F. R. B'd . .	415,765,000	411,210,000	362,468,000
Gold with foreign agencies . .	. . . .	. . . .	111,455,000
Total gold held by banks . .	858,471,000	839,246,000	674,969,000
Gold with F. R. agents	1,759,065,000	1,777,529,000	1,180,393,000
Gold redemption fund	108,429,000	94,353,000	147,710,000
Total gold reserve	2,725,966,000	2,711,128,000	2,003,072,000
Legal-tender notes, silver, etc.	152,719,000	151,968,000	162,123,000
Total reserves	2,878,685,000	2,863,096,000	2,165,195,000
Bills discounted:			
Secured by U. S. Gov't obligations	490,927,000	495,156,000	1,183,017,000
All other	911,976,000	892,081,000	1,526,584,000
Bills bought in open market .	38,889,000	33,541,000	301,510,000
Total bills on hand	1,441,792,000	1,420,751,000	3,011,111,000
U. S. bond and notes	36,485,000	38,081,000	26,924,000
U. S. certificates of indebtedness:			
One-year certificates (Pittman Act)	175,375,000	184,875,000	259,375,000
All other	12,399,000	8,571,000	12,107,000
Total earning assets	1,666,051,000	1,652,278,000	3,309,517,000
Bank premises	29,172,000	29,111,000	15,455,000
5 per cent redemption fund against F. R. bank notes	9,086,000	8,917,000	11,856,000
Uncollected items	508,185,000	591,811,000	819,165,000
All other resources	15,947,000	16,448,000	6,529,000
Total resources	5,107,126,000	5,161,661,000	6,327,717,000

LIABILITIES

	Sept. 28, 1921	Sept. 21, 1921	Oct. 1, 1920
Capital paid in	$103,049,000	$103,017,000	$97,358,000
Surplus	213,824,000	213,824,000	164,745,000
Reserved for gov't franchise tax	51,654,000	50,777,000	....
Deposits—Government	57,253,000	74,183,000	46,454,000
Member banks—reserve ac.	1,635,572,000	1,588,209,000	1,776,243,000
All other	24,580,000	29,218,000	35,363,000
Total	1,717,405,000	1,691,610,000	1,858,060,000
F. R. notes in actual circulation	2,457,196,000	2,474,676,000	3,304,690,000
F. R. bank notes in circulation—net liabilities	101,372,000	103,590,000	213,412,000
Deferred availability items	441,300,000	503,174,000	608,056,000
All other liabilities	21,326,000	20,993,000	81,396,000
Total liabilities	5,107,126,000	5,161,661,000	6,327,717,000
Ratio of gold reserves to deposit and F. R. note liabilities combined	65.3%	65.1%	38.8%
Ratio of total reserves to deposit and F. R. note liabilities combined	69.0%	68.7%	41.9%
Ratio of total reserves to F. R. notes in circulation after setting aside 35 per cent against deposit liabilities	92.7%	91.8%	45.8%

VIII

QUESTIONS AND ANSWERS RELATING TO MEMBERSHIP OF STATE INSTITUTIONS IN THE FEDERAL RESERVE SYSTEM

(Compiled by the Federal Reserve Bank of New York.)

(See text, pp. 452-62)

Rediscounting

SAFETY FOR DEPOSITORS, STOCKHOLDERS, AND BORROWERS

Q. 1. *In what way is membership of advantage to a bank or trust company?*

A. Through membership in the Federal Reserve system, a bank or trust company is assured of greater safety for its depositors and stockholders than when operating as a nonmember bank, not only as to the repayment of deposits, but also as to its ability to continue to grant accommodation at all times.

Q. 2. *In what way does membership insure greater safety to the institution, its depositors and stockholders?*

A. Nearly every bank or trust company has among its assets a considerable amount of commercial paper. If it is a member of the Federal Reserve system, this commercial paper is practically as available as though it were actual cash, for the member bank can at any time take it to the Federal Reserve bank and rediscount

or borrow upon it, and is thus in position to meet whatever demands for cash it may have. Government securities and notes secured by government securities, or given for the purpose of purchasing or carrying government securities, may be used in the same way. The ability of the well-managed institution to meet its obligations is thus assured.

CERTAINTY OF ACCOMMODATION

Q. 3. How does this affect the ability of a bank to grant accommodation to its customers?

A. The ability of a bank to grant accommodation to its customers under our system of banking is dependent upon its ability to maintain a fixed ratio of reserves to its deposit liability. As additional accommodation is extended, deposits increase, and a larger reserve becomes necessary. If the bank cannot obtain this additional reserve, it must cease extending accommodation. By borrowing from the Federal Reserve bank and taking credit upon the books of that institution, the member's reserve is increased and its power to extend accommodation is thereby correspondingly extended to a maximum amount equal, in the case of a country bank, to about fourteen times the amount it borrows from the Federal Reserve bank, and in the case of a reserve city bank or a central reserve city bank, to about ten times and eight times, respectively.

Q. 4. How much can a member bank borrow from the Federal Reserve bank?

A. The law places no limitation upon the amount which a particular member bank may borrow

from its Federal Reserve bank, and the only practical limit is that which would be dictated by the banking judgment of the management of the Federal Reserve bank, having in mind its own position and the needs of all the other member banks.

Q. 5. *Can a member bank borrow on anything besides commercial paper?*

A. Yes. Obligations of the United States government are available as collateral for loans made by the Federal Reserve bank to its members, and notes of customers, secured by United States government obligations, or given for the purpose of purchasing or carrying government securities, are eligible for rediscount.

PRACTICALLY ALL BANKS HAVE PAPER ELIGIBLE FOR REDISCOUNT

Q. 6. *Banks and trust companies frequently state that they do not hold paper of a kind eligible for rediscount at the Federal Reserve bank. Is this true?*

A. The experience of banks and trust companies, ranging from very small banks in the smallest communities up to the largest institutions of this kind in the country, which are members of the system, shows conclusively that practically all such institutions have substantial amounts of paper which is eligible for rediscount at the Federal Reserve bank, and the institutions which have thus far joined have experienced no difficulty in obtaining from the Federal Reserve bank all needed accommodation.

Q. 7. *Is not the paper held by the smaller banks and trust companies, and especially those in small towns, too small to be used for rediscounting?*

A. No. It is probable that the small institutions have an even larger proportion of eligible paper than the larger ones, and no item is too small in size to be used for this purpose. Notes for amounts as small as $5 have been rediscounted, and items of $100, $500, and $1,000 and similar amounts constitute the bulk, in number, of Federal Reserve bank rediscounts.

Q. 8. *What paper is eligible for rediscount?*

A. Generally speaking, the ordinary notes, single or double name, which a bank receives from its business and agricultural borrowers.

More specifically, eligible commercial paper includes notes, drafts, or bills of exchange having a maturity of not more than ninety days (or agricultural paper having maturity of not more than six months), the proceeds of which have been used or are to be used in actual commercial transactions—*i.e.*, in purchasing, carrying, or marketing goods, or in one or more of the steps of the process of production, manufacture, or distribution.

Q. 9. *What paper is not eligible?*

A. Notes, drafts, or bills of exchange the proceeds of which have been used or are to be used for permanent or fixed investments of any kind, such as land, buildings, or machinery, or similar instruments issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the United States, are not eligible for rediscount.

Q. 10. *Is single-name paper eligible for rediscount?*

A. Yes. The test of eligibility is not the number of names on the paper, but whether or not it was issued or its proceeds used for some industrial, commercial, or agricultural purpose.

Q. 11. *If a note has been made for a commercial purpose, does the fact that it is secured by pledge of collateral security make it ineligible?*

A. No, provided it is otherwise eligible.

REDISCOUNTING A SIMPLE OPERATION

Q. 12. *Is not rediscounting very complicated?*

A. No. Items intended for rediscount are listed on an application blank and forwarded to the Federal Reserve bank, which gives credit on the day of receipt, and notifies the applying bank by telegram of the amount placed to its credit.

Q. 13. *How does the Federal Reserve bank collect notes rediscounted with it?*

A. By sending them to the discounting member bank about a week before maturity with the request that it collect them as agent for the Federal Reserve bank. On the day each note matures, it is charged to the account of the discounting member bank.

Q. 14. *What information is a bank required to furnish concerning paper offered for rediscount?*

A. In applying for rediscount the member bank lists the names of makers and indorsers, amounts, maturities, etc., and the proper officer certifies that to the best of his knowledge and belief the paper has been used for a commercial, industrial, or agricultural purpose.

Q. 15. *How is the member bank to assure itself that the paper has been issued for such a purpose?*

A. The knowledge of the officers will usually enable them to make the certificate, but if they are in doubt and the member bank has a financial statement of the borrower or an indorser engaged in business or agriculture, which shows

a reasonable excess of quick assets over current liabilities, the statement may be taken as evidence that the paper has been issued for a commercial or agricultural purpose.

Q. 16. *Must financial statements of borrowers be furnished when applying for rediscount?*

A. The regulation of the Federal Reserve Board requires that whenever a member bank has rediscounted or offers for rediscount at the Federal Reserve bank obligations of one name to the extent of $5,000 or more (or in the case of banks having a capital of less than $50,000, a sum equal to 10 per cent of the paid-in capital of the bank), it shall have in its own files a statement in respect to one of the names on the paper. The purpose of this requirement is to stimulate member banks to build up their credit files and to make it possible for them to get statements from borrowers who have heretofore been unwilling to give statements. *No statements are required to be submitted to the Federal Reserve bank with the application for rediscount, but the member bank indicates on its application all names in respect to which it has statements on file, and the Federal Reserve bank, if it desires copies of any of these statements, will later ask for them. The Federal Reserve Board makes no requirements whatever regarding statements from the smaller borrowers.*

Collections, Transfers, and Currency Shipments

ECONOMICAL CHECK COLLECTION

Q. 17. *What service does the Federal Reserve bank render in connection with the collection of checks and drafts?*

A. The Federal Reserve bank collects at par for member banks checks on over 21,000 banks in all parts of the United States, including all national banks and a considerably larger number of state institutions, as shown in a par list furnished to all member banks. It is optional with every member bank whether or not it collects its checks through the Federal Reserve bank.

Q. 18. *Is there any charge for these services?*

A. No.

Q. 19. *When is credit given for checks collected?*

A. For checks on banks in the Borough of Manhattan, received before 9 A.M., immediate credit is given. Checks on Boston, Philadelphia, Richmond, Norfolk, and Baltimore are available one day after receipt. For other checks in this and near-by districts credit is given two days after receipt and checks on more distant points are credited four and eight days, respectively, after receipt.

Q. 20. *How should checks be sent to the Federal Reserve bank for collection?*

A. In the same manner as remitted to other correspondents, except that they should be classified according to time of availability—*i.e.*, one-day items listed together and totaled, two-day items, likewise, etc.

Q. 21. *Can checks be sent direct to other districts or must they all be sent through the Federal Reserve Bank of New York?*

A. Arrangements for direct sending may be made, in which case the checks are sent to the Federal Reserve bank of the receiving district, as, for instance, banks in Rochester having checks on banks of the Chicago district can send these items direct to the Federal Reserve Bank

of Chicago and receive credit with the Federal Reserve Bank of New York at the time the checks are due to be paid, this being accomplished by the Rochester bank's sending a duplicate remittance slip to the Federal Reserve Bank of New York at the time of mailing the original remittance and items to the Federal Reserve Bank of Chicago. The moment the checks are collected in Chicago the funds automatically become reserve to the member bank in New York.

Q. 22. *How are items on member banks in this Federal Reserve District handled?*

A. Items drawn on a member bank are mailed to it, and the member bank, upon receipt of the items, forwards in payment draft on the Federal Reserve bank or other funds available on the day of receipt, thus keeping the transactions separate from its reserve account.

Q. 23. *Suppose the member bank has not sufficient available exchange with which to make the remittance?*

A. The member bank may ship currency or specie from its own vaults at the expense of the Federal Reserve bank.

Q. 24. *What are the advantages of collecting checks and drafts through the Federal Reserve bank?*

A. (1) Greater economy in collecting these items and avoidance of the necessity of maintaining balances with correspondents in various cities in order to obtain check collection facilities.

(2) The most direct routing of items possible, with corresponding reduction in the length of time items are outstanding, which results in the elimination of float and enables member banks and their customers

to learn at the earliest possible moment whether items have been paid or dishonored, and to have the funds represented begin earning interest more quickly.

COLLECTION OF NOTES AND BILLS OF EXCHANGE

Q. 25. *Does the Federal Reserve bank also collect notes, drafts, and bills of exchange?*

A. Yes. Drafts, notes, coupons, acceptances, etc., are collected without charge other than any exchange charge which may be made by the collecting bank. For items returned unpaid, an additional charge of fifteen cents is made, the purpose of this charge being to prevent the clogging of our facilities with dunning drafts.

No charge is made for collecting coupons other than expenses of registration and insurance or express, plus any charge made by the collecting bank.

MONEY TRANSFERRED WITHOUT CHARGE

Q. 26. *What advantages does the Federal Reserve bank offer in transferring funds?*

A. The Federal Reserve bank makes telegraphic transfers of funds at par to any part of the United States for its members without any charge whatever. For example, upon request from a member bank in Utica the Federal Reserve Bank of New York would wire the Federal Reserve Bank of Dallas to pay or credit to any of its members a specified sum, no charge being made for this service. Such transfers may be ordered by telegraph, charges collect.

A member bank may also draw special drafts

on its Federal Reserve bank for amounts not exceeding $5,000 which are *receivable for immediate availability* at any other Federal Reserve bank. It may also make special drafts on its Federal Reserve bank which are *payable* at any specified Federal Reserve bank, no limit being placed on such drafts. In either case the member bank must advise the special draft to its Federal Reserve bank, which, upon receipt of the advice, charges the amount to the account of the member bank. The member bank is thus placed in position to obtain without cost, and furnish to its customers, exchange on any of the twelve Federal Reserve cities at any time or season.

These facilities are made possible by the gold settlement fund which the twelve Federal Reserve banks maintain at Washington and through which they settle daily their obligations to one another by transfers on the books of the fund instead of by actual shipments of currency or coin. The gold held in this fund amounted in June, 1919, to almost $600,000,000.

CURRENCY

Q. 27. *What must a member bank do to obtain Federal Reserve notes from the Federal Reserve bank?*

A. Federal Reserve notes in denominations of $5, $10, $20, $50, $100, $500, $1,000, $5,000 and $10,000 are shipped to member banks on request, by registered mail, insured, and the member bank's account charged with the face amount, thus providing clean currency at all times.

The Federal Reserve Board has authorized

the Federal Reserve banks to absorb the expenses in connection with transactions between them and their member banks, as follows:

(a) Payment of all postage, express charges, insurance, etc., incident to shipments of currency to and from member banks; and

(b) Payment of charges on all telegrams received from or sent to member banks in connection with currency, exchange transfers, and deposit transactions.

Shipments of gold, gold certificates, silver certificates, and legal-tender notes may be made to the Federal Reserve Bank of New York either by express or by registered mail for credit of the member bank's account or for exchange for Federal Reserve notes. We pay transportation charges on gold, gold certificates, and silver certificates, whether fit or unfit for circulation, and also furnish, free of expense, Federal Reserve notes in exchange.

Q. 28. *In what amounts are Federal Reserve notes available?*

A. The Federal Reserve bank is not limited as to the amount of notes which it may issue, except by the provision that a 40-per-cent gold reserve must be maintained against Federal Reserve notes in actual circulation.

The Federal Reserve Bank of New York now has in actual circulation approximately $760,000,000 of Federal Reserve notes. It always maintains, ready for issuance, a very large supply of unissued notes, which assures member banks of an ample currency supply at all times.

Q. 29. *Can the Federal Reserve bank supply $1 and $2 notes?*

A. Yes. The Federal Reserve bank is at present

issuing Federal Reserve bank notes of these denominations, which can be supplied in the same manner as other currency.

Q. 30. *Does the Federal Reserve bank furnish subsidiary silver coin and minor coins?*

A. Yes. It will furnish such coins and pay cost of shipment thereon.

IX

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Lyon, H., *Corporation Finance.*

7. Savings Banking

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9. Banking System

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Conant, C. A., *History of Modern Banks of Issue.*
Hepburn, A. B., *History of Currency.*

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Warburg, P. M., *Essays in Banking Reform.*
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10. Money and Prices

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Hobson, J. A., *Gold Prices and Wages.*
Kemmerer, E. W., *High Prices, Inflation and Deflation.*
Laughlin, J. L., *Money and Prices.*

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